

JAN 19 1912

Containing a Decorative Lighting Supplement

VOL. XI. NO. 1

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JANUARY, 1912

SELLING ELECTRICITY and ELECTRICAL MERCHANDISE

Published by THE RAE COMPANY, 17 Madison Ave., New York

This MAGAZINE Costs 8 1-3 CENTS

There are ideas in it worth

8 1-3 DOLLARS

to any man who is working in the commercial department of a Central Station or as salesman for an Electrical Supply Dealer or Contractor. ¶ The Dollar you send as a subscription to this magazine pays

10,000% PROFIT.

Send that Dollar Today.

SELLING
17 Madison Avenue

NEW YORK CITY



THE accompanying illustration is one of the many designs of indirect lighting executed by me and used in Residences, Public Buildings, Churches, etc. If properly used this effect is the nearest approach to daylight yet produced in artificial illumination. Have furnished about one hundred residences throughout the country in which this style of lighting was used and has given the best results. For reference I give you a few of the buildings furnished with this system of lighting.

Canyon Hotel, Yellowstone Park, Wyo.
Hannibal National Bank, Hannibal, Mo.
Hannibal City Hall, Hannibal, Mo.
Farmers & Traders Nat'l Bank, Hannibal, Mo.
Stock Yards National Bank, So. Omaha, Nebr.
Rock Island Savings Bank, Rock Island, Ill.
State Savings & Trust Co., Moline, Ill.
Mudavia Hotel, Kramer, Ind.
First National Bank, Lincoln, Nebr.
and many others too numerous to mention.

Consult me as to your requirements and I shall be glad to submit cuts and prices.

WILLY H. LAU
56-58 E. Lake St., Chicago

This Advertisement was part of our campaign in one city. Similar advertisements throughout the country backed up by our Salesmen sold over \$250,000 worth of electric light to previous non-users of electricity last year.

SPECIAL OFFER

New Flat Rate Residence Lighting

With our new schedule of Flat Rate for Electric House Lighting you may contract for any number of Electric Lights to burn anywhere in your house at any time, and be assured that your bill will be the same each and every month, and you will know beforehand what your bill will be.

You may choose the number of lamps, thus fixing your own rate, *without meter*.

A small house will cost \$1.00 per month—larger houses will cost \$1.25 to \$1.75.

This rate allows the use of Electric Light at a cost far below that of any other form of House Lighting.

**If Your House is Not Wired
We Will Wire it for**

FOUR DOLLARS

PER ROOM

***Including Brush Brass
Fixtures***

**METROPOLITAN
ELECTRIC
COMPANY**

16 South Fifth St.
Meco Bldg. Both 'Phones

Please have your
representative
call on me with
out obligation on
my part.
Name
Address
at o'clock 1911

Write us to learn how we did it

Excess Indicator Company
105 West 40th Street, New York, N. Y.

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When the Buckeye Salesman Calls

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E are proud of the men who represent us. They have our confidence, self-confidence and — the confidence of our customers.

When a Buckeye salesman calls upon you, he is not there to "sell you" by main strength. He is there to learn your requirements—to study your lamp problems and co-operate with you in solving them to YOUR best advantage.

Our salesmen believe, and we believe, that your lamp problems can best be solved if you buy Buckeye Lamps. But we want you to buy the right Buckeye Lamp for the service required—the particular lamp that will give you the maximum efficiency, everything considered. You may not know which lamp will do this. The Buckeye salesman will tell you—and you can rely upon his word as upon that of your own engineer or purchasing agent.

So the next time a Buckeye salesman calls, do not hesitate to make use of his specialized knowledge. You will find him the kind of man whom you would like to have represent *you*. That is the best thing we can say for him.

THE BUCKEYE ELECTRIC CO. CLEVELAND

CHICAGO

PITTSBURGH

DALLAS

BOSTON



The Westinghouse Electric Frying Pan

A new Westinghouse heating device. More practical than the old-fashioned frying pan, inexpensive in first cost, and economical in operation. A quick seller and a reliable load-builder.

It will not only fry everything that can be fried in the old-fashioned way, but it can be used for creaming chicken, making Welsh rarebit and lobster à la Newburgh, stewing oysters, etc. Then when turned upside down on its stand, it forms a regular electric stove for making coffee, toasting bread, and cooking many other things.



It is light, easily handled and cleaned, and is practically indestructible. The heater is hermetically sealed in the bottom of the pan itself, not in the stand. *The heat can be regulated—high, medium, or low—by means of an indicating switch.*

Supplied in two sizes, 6-inch and 7½-inch. Made of polished steel and has an aluminum stand.

*Write to Publicity Department N for catalogue section 415
giving full information about the frying pan.*

Westinghouse Electric & Mfg. Co.
East Pittsburgh, Pa.

To the Electrical Fraternity:

On January 1, 1912, over one-half of the 105,000 square feet of Exhibit Floor Space—the entire Mechanics' Building in Boston, Massachusetts—had been sold for

The 1912 Boston Electric Show

Sept. 28 to Oct. 26, 1912

inclusive

A new high record for Advance
Space Sales.

The Biggest Electric Show in the Biggest Building with the Biggest Space in the World.

If your space is not reserved, wire, collect, Day or Night Lettergram or Cablegram.

H. W. MOSES, Manager
39 Boylston Street, Boston, Mass., U.S.A.

Cable Address: ELECSHO, Boston

Under the Auspices of The Edison Electric Illuminating Company of Boston



Where the Greenwood Signs are built.

Our Factory is like the Shoemaker's Children

*For There's "Nary" a Sign on The
Roof. But That's all That
is Missing—And We're
Building Those Signs
Right Now!*

This picture shows the size of the **Greenwood Factory** in Knoxville, Tenn., and every square foot of it is busy with our work of building Electric Advertising—Electric Sign Salesmen for every kind of customer and every kind of business.

There is one word that explains why this Greenwood Factory **is** always busy,

Individuality

We have set ourselves to create not only signs that are "different," but sign-salesmen of strong personality, electric advertising that actually sells goods.

There are two reasons why we have been able to make this principle a practical success in our sign building; the Greenwoods have been artists for generations (that gives us our ideas) and the Greenwood Factory is equipped for every kind of job that a sign can embrace. Every Greenwood Sign is built to live long and prosper and that means the highest standard of workmanship and material, backed by the real spirit of a real salesman.

Greenwood Advertising Co.
Knoxville, Tenn.



A glimpse of the Greenwood Office. The Greenwood Slogan—"INDIVIDUALITY" is ever before our eyes

In writing to advertisers, mention "Selling Electricity"



The Most Important
Thing in Building an
**Electric
Sign**

is to have it in
Harmony with
the Business it
is working for

That's what makes the difference between "just an electric sign" and electric advertising—the sign must have the spirit of the business to represent that business as a salesman. It must do more than simply make a forceful and far-reaching impression—it must make the right kind of an impression.

This is a recent Greenwood sign on a jewelry store. It is of classic design—though in the photograph we lose all that effect of finish which gives the

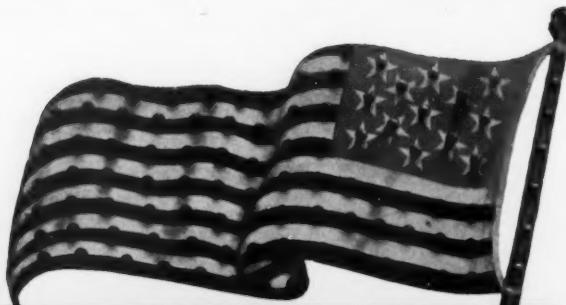
Individuality

The dragon is in amber tones and with the decorations is finished in pure gold leaf. The background is black sand. The torch flames are in red. The clock is operated by a master clock inside the store.

The Renkl Jewelry Store is a thoroughly modern and beautifully appointed salesroom, and the Renkl Sign is in thorough harmony, both with the business and the building.

That's the Greenwood way of building signs.

Greenwood Advertising Co.
Knoxville, Tenn.



This Sign has been a Great Success

Nobody ever passes it without getting the message, for it calls you and then talks to you.

The flag waves first, briskly and in a most realistic manner, then the two words flash on and off alternately, as though some one were calling—"Lace Store! Lace Store! Lace Store!"

That sign is a salesman and no more durable sign was ever built. Buy your next sign from

YOERGER-BUTTERWORTH SIGN CO.
COLUMBUS OHIO

1911 Was Our Banner Year

and 1912 will be Yours

if you will take advantage of the extensive educational campaign we are carrying on with your consumers.

Thor Electric Home Laundry Machines

have overcome the natural prejudice against electrical devices for doing the weekly laundry work in over 33,000 homes.

The Most Practical, Economical and Efficient Electrically Operated Household Device in the world. Sizes and Designs to Meet the Various Requirements.

PRICES \$50 AND UP

Send for Catalog E and Special Selling Plans.

HURLEY MACHINE COMPANY

25 So. Clinton Street, Chicago

New York

1012 Flatiron Bldg.

Los Angeles

3rd and Main Streets



In writing to advertisers, mention "Selling Electricity"

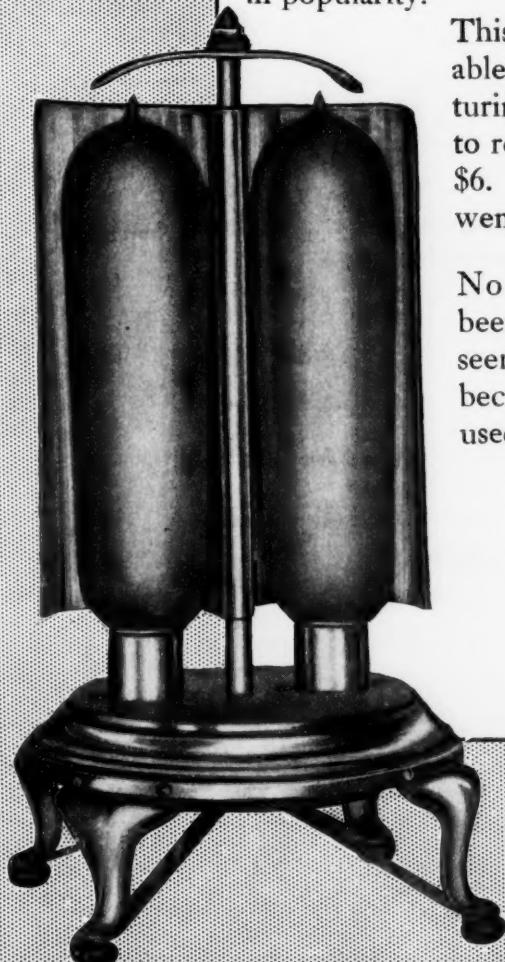
Twin Glower Luminous Radiator

Its rapidly growing popularity will double because of its new and popular price.

Since its introduction last spring, this lighting circuit (500-watt) luminous radiator has become so popular that it promises to rival the radiant toaster in popularity.

This exceptional demand has enabled us to increase the manufacturing efficiency and thus be able to reduce the list price from \$8 to \$6. This 25% price reduction went into effect December 1, 1911.

No detail of quality or finish has been changed in any way because it seems assured that this radiator will become one of the most universally used heating devices on the market.



**General
Electric
Company**
Schenectady, N. Y.

3332



An Innovation in REFLECTORS



For *Billboards, Bulletins, Walls, etc.*

Heavy galvanized iron hood; lined with mirror glass; octagonal in design; throws strong white light with perfect distribution, and casts no shadows.

Write for descriptive Bulletin No. 15

Don't forget that we make Electric Sign Flashers also

Reynolds Electric Flasher Mfg. Co.

Largest Manufacturers of Flashers in the World

Also Manufacturers of Billboard Reflectors, Transformers, Time Switches, Window Displays, etc.

617-631 W. Jackson Blvd., Chicago

1123 Broadway, New York

OUTDOOR ADVERTISING EVERYWHERE

The O.J. Gude Co., N.Y.

Originators of Spectacular Electric Sign Advertising, and of the
"Great White Way", New York City

Owners of Electric Moving Sign U. S. Patent No. 648,677

SELLING ELECTRICITY

and ELECTRICAL MERCHANDISE

VOLUME XI

NUMBER 1

Contents for January, 1912

	Page
Your Opportunity in the Commercial Section	<i>George Williams</i> 11
Commercial Section Plans	12
Power in the Furniture Factories	<i>A. C. Martin</i> 14
A New Slogan Sign	16
The Model Sign Ordinance	17
An Alternative for Program Advertising—Dollar Idea	22
The Best Sign-Lighted City in the World	23
Luminometers vs. Municipal Ownership	<i>Glenn Marston</i> 25
Coal Oil vs. Electric Street Lights Demonstrated by Vehicle Power	28
An Electric Band Wagon	29
Thirty Blocks of Decorative Arches	30
Union Company Presents Slogan Sign to St. Louis	31
A Village Entertainment to Buy Street Lighting	32
Editorial	33

ELECTRICAL MERCHANDISE

Know the Answers !	35
A Suggestion for the Contractor	36
Interesting New Floor Polishers	39
A Fixture Straightener	42
An Electric Frying Pan-Stove Combination	43
A New Magnetic Arc Equipment for Ornamental Street Lighting	45

ELECTRICAL PROGRESS—Decorative Street Lighting Number

The Influence of Light	(Three)
Harnessing the Commercial Loadstone	(Five)
The Personal Post Ad	(Six)
Ornamental Lighting for Residence Streets and Private Estates	(Seven)
How to Organize Co-operative Lighting in Your Town	(Eight)
Why Special Street Lighting Appeals to the Lawyer, the Clergyman, and Others	(Eleven)

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Entered as second-class matter, February 28, 1908, at the Postoffice at Brattleboro, Vermont,
 under Act of Congress of March 3, 1879.

THE “National” Storage Battery For Electric Vehicles and Trucks

The points about this battery are that it is carefully designed and built with thoroughness. It has great vitality and will give the best economy in actual service. When we talk about economy, we do not have in mind a discussion that would make you dizzy to follow and the gist of which would be that you are crazy to think of any other Battery than the National.

Your electric vehicle service for the next three years will “set you back” fewer dollars if you use the National than if you use any other make. That’s simple, isn’t it?

The National Battery is made with four distinct plate types offering four distinct economy characteristics and covering the entire field from average short runs to average extremely long runs.

Our engineering service is yours to help you analyze your particular conditions in order to secure the utmost economy.

The United States Light and Heating Company
General Offices: 30 Church St., New York. Factory: Niagara Falls, N. Y.

New York Boston Buffalo Cleveland Detroit Chicago St. Louis
Sales Offices and Depots

SELLING ELECTRICITY

and ELECTRICAL MERCHANDISE

Edited by FRANK B. RAE, Jr.

EARL E. WHITEHORNE, Managing Editor

Your Opportunity in the Commercial Section

A Personal Message to Every Salesman in the Electrical Industries

BY GEORGE WILLIAMS

Henry L. Doherty & Company, New York; First Chairman Commercial Section

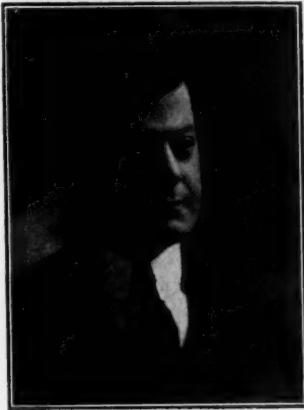
Did you ever stop to consider what the electrical industry means to us all, today, and to the world, and what it might be if there had been no National Electric Light Association? And do you realize that there are already many benefits which have accrued directly

and linemen, but in some instances whole communities. And many of them, since the Section was organized, have materialized into money made, better positions, service improvement, and new manufactured goods.

And the opportunity? Some time ago, I read a statement somewhere that the central stations of this country were doing a gross business of over \$250,000,000 per year. If the organized efforts of the Commercial Section should increase this present business by but a small percent, think how enormous the aggregate would be!

The Commercial Section needs and deserves more members. The non-member right now is enjoying the fruits of the National Electric Light Association labor, for, whether he cares to acknowledge this or not, he is inevitably a beneficiary. If he simply joins and contributes his dues he has strengthened his own interests, perhaps paving the way for future employment or increases of salary that would not otherwise arrive. But to the man who joins with a working will and accepts the advantages that the Section now presents to its members, with all that the future offers, there awaits pretty nearly everything the world considers worth while striving for.

Knowledge of every useful feature of electrical service is now being collected and disseminated by special



George Williams

from the organization of the Commercial Section? If the results derived from the year's Association work of the thousand members of the Commercial Section could be computed it would be found that the electrical world is a number of times one million dollars richer for it. There have been single new business transactions which have favorably affected not only manufacturers, supply men, plant operators,

committees in the Commercial Section—by novices? Oh, no! Look over the personnel of our committees. These men will not be apt to go very far astray from the best discoveries, best methods, and the best of everything that means progress to the worker and to the corporation. Moreover, their viewpoint is not that of one town or one state; it is national or universal. The committeemen are not working for fun, their Association work amply repays them, for they are all men who have responsible positions in the industry, and the experience and data it brings them are of immense value.

It is important for every new business man, whether employed by a central station company, a manufacturer, or a distributor of electrical goods, to participate in this Commercial Section work; just as important as it is to those who are now performing it. No one in the industry can afford to stand still, for no matter how proficient he may be today, he will not be competent a year or two from now unless he makes steady progress. Every man awaits promotion, and it is a trait among those who have the power of selecting, that they favor men who have some knowledge of how things are done outside of their own local spheres of work. This is not because they want ramblers or rovers but because the candidate with a broad viewpoint is most apt to adapt himself to strange conditions, and therefore has the ability to get results sooner than men of more limited knowledge and a narrower conception of things.

Some of our progressive central stations are already enjoying a gross revenue equal to forty cents per capita, from sales of current for electric vehicles, yet in many cities which are ideal for such business, the revenue is no more than five cents. The data supplied by the committee on electric vehicles last year, if acted on, would mean many thousands of dollars increase of revenue to many companies. There is not a problem in the business which confronts the com-

mercial man that he cannot speedily solve through the services of the Commercial Section.

The men who are considered "big men" in the business today had no "pull" to arrive where they are. The business was a small affair when they started, and they could not have been born into their positions. Most of them either started in a small way in the big cities or in little cities where the whole volume of electrical business did not equal some of the present sign loads of a city block. Compare the names in the directory of the N. E. L. A. with the names of the men who have made creditable progress in the industry. You will find, with rare exceptions, that the names of the latter are included in the directory. This is not because the N. E. L. A. is a "rabbit's foot" or because the "comer" thrives from any "pull" from the Association; it was simply a process of self-improvement.

What the 1911-12 N. E. L. A. Organization supplies and serves to its members is worth many times to them what it could possibly have tendered a few years ago. The Association is more than a great and growing school; it is a key to all the knowledge of the industry. The Commercial Section exceeds today in its useful functions a greater scope than the early members of the N. E. L. A. ever prophesied for the entire Association.

Bacon said: "Reading maketh the full man; conference a ready man; and writing an exact man." A membership in the Commercial Section embraces all of these, and one other which might be added: it makes a prosperous man.

Commercial Section Plans

*What the Committees and the Central Bureau are
Undertaking for 1912*

An interesting statement has been issued by the secretary of the Commercial Section, covering the work which is planned for the coming pre-convention months. The very large demand for the two booklets published by the

last administration has been so encouraging—65,000 copies of "Data on Electric Signs" and "The Electric Equipment of the Home" have been distributed by members of the Commercial Section up to now—that three of the present committees will accumulate data and publish at least three books to be available to members, probably previous to the coming convention. The subjects will be Street Lighting, Industrial Lighting, and Residence Lighting, and Heating and Cooking Devices for the Home.

Another, and perhaps the most vital work planned, will be the compilation of a "cumulative commercial index," in which it is hoped to give, in a complete usable form, all classes of information necessary in the work of the commercial men of the industry. A running digest will be made of all commercial articles of interest which have been published in various electrical and class journals, from a period of at least five years back, and will be in the form of a digest and index, including also, chapters in the various papers, and articles published or read before the different societies and associations, whose work has any commercial bearing, or whose ramifications lead toward greater commercial development in the electrical industry. In addition, there will be chapters devoted to current-consuming devices, giving descriptions of just what each device is and what it is intended to do, together with complete price lists, selling policies of the manufacturers, etc., and chapters devoted to public policy as affecting customers, contractors, jobbers, etc.

Another work, which will be of the utmost practical benefit in the development of the industry, will be the institution of an advertising exchange for members, the object being to concentrate in the central bureau all classes of advertising devoted to the sale of current and current-consuming devices, contemplated or actually being done by member companies. Embodying, as it will, all of the best thought throughout the entire country, it will

give to every operating company, large or small, the opportunity of being able to use in its advertising and sales departments, the choice of material, which has already proven its value in increasing and developing business in other cities.

The secretary of the Commercial Section, Mr. Philip S. Dodd, has recently made an extensive trip to the Pacific coast and reports a most enthusiastic reception for the Commercial Section and its work. It is evident to all that this new Section of the National Electric Light Association has already become a vital factor in the development of the electrical industry as a whole; a great co-operative movement, the success of which is having and will have a direct bearing on the profit sheets of operating companies, manufacturers, and distributors alike of electric current and current-consuming devices.

**L. D. Mathes Goes to Montgomery,
Alabama—P. B. Sawyer Takes
His Place in Dubuque**

Mr. L. D. Mathes, general manager of the Union Electric Company of Dubuque, Iowa, has resigned his position with that company to become general manager of the Citizens' Light, Heat & Power Company and the Montgomery Traction Company of Montgomery, Alabama. Mr. Mathes is one of the most prominent central station men of the middle west, having been former president of both the Iowa Electrical Association and the Iowa Street and Interurban Railway Association, and has been most successful in building up the Dubuque properties.

Mr. Mathes took charge in Montgomery on December first, and was succeeded in Dubuque by Mr. P. B. Sawyer, formerly general manager of the Des Moines Electric Company of Des Moines, Iowa. The Union Electric Company of Dubuque controls both the central station and the street railway lines of that city.

Power in the Furniture Factories

How Collateral Efficiencies may be Invoked to Strengthen the Case of the Central Station

BY A. C. MARTIN

Power Engineer Rockford Electric Company, Rockford, Ills.

The determining factor in selling power to a furniture factory is no different from what it is in any other industry; it depends in every case on the present cost of power and the present power efficiency in the plant itself. In order to present a practical demonstration of the superiority of central station electric power, in comparison with



A. C. Martin

steam or an isolated plant, it is first necessary to educate the prospect to a point where he appreciates the actual costs and losses in his present plant and equipment and the opportunities for better profits which can be realized by a reorganization.

In developing business among wood-working plants, we find almost invariably, that the prospect greatly underestimates the cost of his power, because a large proportion of his fuel consists of refuse—sawdust, chips, and blocks of wood delivered into the boiler room through a system of pipes and blowers, which catch the waste as it leaves the machines. And because this is refuse and of no positive value as far as utility in that factory is concerned, the manufacturer is prone to

overlook the fact that it nevertheless has a cash value in its influence on plant efficiency. We have in Rockford and vicinity a number of large furniture factories, and we have made a close study of power conditions and collateral influences in this industry, with the result that we are making steady gains for electric power.

The first wedge entered in this class of business was the capture of a new plant having a connected load of 200 horse-power. Here we encountered a serious obstacle, in the shape of a large blower, which was permitting a great waste of power. It is customary in such plants to equip each suction pipe for carrying refuse to the boiler room with a slide, so that the suction can be closed when the machinery is not in use. It is also customary for the operatives to leave these slides open and waste power. This carelessness was costing this particular consumer approximately \$50 per month, and threatened to thwart our efforts to prove the economy of electric drive. We brought this leak most forcibly to the attention of the manager, however, by installing a "graphic" meter on the blower motor and taking records for several days. After this, further graphics were taken for a number of days more, while the slides on all machines not in use were kept carefully closed. A comparison of the curves before and after the proper closing of the slides resulted in a strict order being issued to the foreman, while cards were placed at each machine, calling the attention of the operatives to the necessity of closing the slides.

Another barrier to our power here was the large amount of coal being burnt for dry kiln and heating purposes. The manager contended that,

inasmuch as he had to buy coal anyway for operating his kiln and heating plant, and was running his generator practically with steam made from refuse, there did not seem to be much inducement to use central station current. On analyzing the problem, however, we found that the fireman, apparently seeing no better way of disposing of the refuse than by burning it, had become expert in keeping the place clear of the enormous amount of sawdust and blocks that came to the fire room, with the result that it was necessary to burn coal at night. He had made his chief aim to keep that refuse bin empty, rather than to see how much steam he could make it produce, and how little coal he could use.

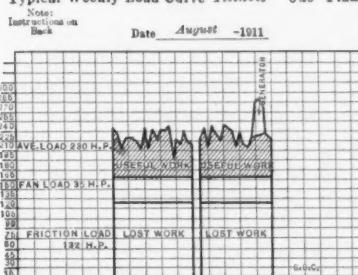
A little educational work along the lines of the scientific firing of offal resulted in cutting the coal bill to a reasonable figure, for the sawdust and chips that came from the blower were sufficient to keep steam during the day and the blocks and strips are stored in the coal bin, to be burnt at night. During mild weather these blocks are more than sufficient to supply the steam requirement, so the surplus is left in storage, to be used later, and the factory now uses coal only during the coldest winter months. By keeping the power and coal bills at a reasonable figure, this plant has become our best booster, as all eyes had been turned in its direction, and there were many prophecies that the end of the first year would see them installing an engine and generator; but our foresight, in stopping these two leaks, resulted in a long term contract.

Power in the furniture factories came easier after this shop was operated successfully, and we have taken the greatest care to have each installation of motors the most efficient for the service. One notable installation is a shop equipped with individual motors and individual blowers; this system of blowers is materially reducing the power cost of this shop and should always be considered when a wood-working establishment is

equipped for central station power. It has been our practice here to specify the individual blower where conditions will warrant it. Of course, it has its limitations, but the power man can decide by studying conditions in the mill room and using the same good judgment necessary in applying group or individual motor-drive.

If a plant is already equipped with a blower system, when installing central station power, attention should be given to the blower and cyclone, to see that its present operating conditions are the most economical. The factory of one of our customers was equipped with a blower that was operating at 1,750 rpm. when driven by the engine,

Typical Weekly Load Curve Illinois Cab Plant



The Rockford Method of Reporting on Present Conditions

and the same speed was figured when the motors were installed, showing on test that the power necessary was 32 kilowatts. After experimenting, it was found that a slower speed would suffice to take the refuse from the machines, even with all the slides left open, and in consequence, we reduced the speed permanently, and made a saving of 10 kilowatts per hour.

Too much attention cannot be given to the small factory, for very few industries stand still, and any constructive investment of time in the interests of the small user will usually pay big dividends. In one case in Rockford, a small wood-working shop, operating four 7 1/2 hp. motors, has so developed financially in the course of two years, that they are now contemplating building one of the largest factories in the city. The power question has

been decided in favor of individual motors and blowers, with the central station supplying the energy; and this business was secured solely through having this small user so thoroughly satisfied that the idea of an isolated plant was never entertained.

To secure the business of the wood-working industry, every care is taken to have the prospect thoroughly interested and certain of the cost of his isolated plant. It requires constant "plugging" to "develop" a man properly, but all preliminary work should lead to a point where the prospect will consent to an indicator test of his engine. The result of this test should be plotted graphically, as is shown in the accompanying reproduction of a recent case in Rockford. This curve shows the typical curve of a furniture factory having a large blower and line shaft drive. With a curve such as this we show the prospect the relation between the useful work and friction load; and this gives him food for thought, and also furnishes the best of data for estimating the power consumption with electric drive. When the load has been determined, the factory manager is usually interested in the cost of the power, and to facilitate his figuring we furnish sheets with the items of power cost enumerated, so that his own investigation may be complete. We make no attempt to sell power or present a proposition until the correct cost of operating the plant under existing conditions has been determined, for otherwise the estimated cost of electric drive is almost sure to be 'way beyond what the manufacturer thinks he is paying for power, and the proposition will die in a pigeonhole.

The advantages of electric power in the wood-working industries are just as pertinent and provable as in any other field, but they must be demonstrated through the analysis of present power inefficiencies and the development of such mechanical and labor economies as are possible in almost every plant. Many a profitable opportunity is sacrificed because the

salesman confines his attention strictly to the power system itself, forgetting that, after all, the object is to secure the business and that every efficiency he can introduce, no matter where he finds it, makes his case just so many dollars stronger.

A New Slogan Sign

That the slogan sign is an agent of optimism, quite as practical in the small as in the larger city, is apparent from this new "booster" sign, recently installed in Clinton, Iowa, a town of 25,577. The idea was suggested by Mr. Thomas Crawford, general manager of the Clinton Gas Light & Coke Company, and the Commercial Club adopted it with enthusiasm, and had the



sign built and erected at its own expense. The sign burns 250 two and one-half watt tungsten sign lamps, and the current and renewals for two years have been donated by the light company. The sign is installed beside the railway and is advertising Clinton as "The Bright Spot," far and wide, to the intense satisfaction of the community.

The Model Sign Ordinance

With a Few Criticisms from Central Station Men

At the last convention of the National Electric Light Association, the Sign Committee of the Commercial Section submitted a Model Sign Ordinance, which was recommended as a fair and equitable safeguard for all parties concerned—the municipality, the central station, and the sign manufacturer. In discussing this ordinance, Mr. E. L. Callahan, Chairman of the Committee that drafted this ordinance, expressed the purpose of the Committee as follows:

"It is very important for the best interests of central stations to take up the question of securing a sign ordinance in each city, whether large or small. Just as sure as this is not done, because of accidents through falling signs, or improper wiring and insulating of signs, or the hanging of unsightly signs, the public will sooner or later object and city councils and commissioners will legislate against them and either cause them to be removed or limit the distance which they may project from buildings to 18 inches or as a maximum, 3 feet. This will work a hardship on central stations, not only in depriving them of the certain revenue, but by forcing into the scrap heap signs which they own and rent to merchants, as well as signs owned by merchants. Central station men should not have any fears in immediately going to their city councils or commissions, explaining that electric signs are a benefit to the city because they brighten it, help to make business more brisk, and secure without cost to the city a certain amount of illumination for sidewalk and street, and that by properly regulating their erection and design accidents can be prevented and the streets will not be cluttered up with a forest of unsightly signs of various designs and sizes.

"I believe that if this model sign ordinance is presented to city councils and commissions with such changes as

may be necessary to fit local conditions, a very desirable sign ordinance may be put into effect in every city and town in the country. It needs to be presented properly, however, with strong arguments in favor of good regulation, and above all in a manner that will convince the city fathers that proper inspection of signs is absolutely necessary, that only competent men should be allowed to manufacture and hang signs, and that signs should be illuminated up to a fairly late hour at night.

"The newspaper should and can be enlisted in the support of an equitable ordinance. I am sure they would gladly devote space in their columns to the subject. One good way to start the ball rolling, it would seem to me, would be to get the local contractors and a number of leading business men together, after having quietly prepared the 'city fathers' for such a moment, and have this committee go before the city council or commission as a body and discuss the subject, bringing out the important points. The city, without doubt, would be glad to look into the matter and would probably request some assistance of the central station in drafting an ordinance. This is where the central station can bring forward the model sign ordinance and other good ordinances in effect in various cities, with the result that a fair and equitable ordinance may be drafted."

The model ordinance, which follows, reprinted in full, was advocated quite as strongly by the electric sign manufacturers as by the central station members of the Committee. Mr. Herbert I. Markham, general manager of the Federal Sign System (Electric), says:

"It is an extremely rigid ordinance and will work hardships on the careless manufacturer and on the careless sign hanger, but in view of the public nature of the electric sign business it

is for the general good of the Central Stations and the sign manufacturers that these careless ones either be eliminated or mend their ways, for one or two falling signs would very seriously injure the business.

"The section regarding yearly inspection at an annual issue fee is a particularly good one, as it works well with the rest of the ordinance in the assurance of a perfectly safe projecting sign. An ordinance very similar to this has been in effect in Detroit for some time and from the reports there I understand that it is working to the entire satisfaction of the public, the city, the central stations, and the sign manufacturers. I would be glad to see such an ordinance in effect in our larger cities throughout the country."

THE ORDINANCE

Signs

Section 1. No sign to be erected or altered without a permit.

No sign, such as is hereinafter described under this article, shall be erected or altered within the City of, unless a permit shall have been first secured from the Department of Buildings, by the person, firm or corporation desiring to erect or alter such sign. All applications for such signs shall be accompanied by such drawings and descriptions as are necessary to fully advise and acquaint the said Department of Buildings with the location, construction, weight, materials and manner of securing or fastening such proposed sign. If said sign, as indicated in said drawings and descriptions, shall be in accordance with the provisions of this article, said Department of Buildings shall thereupon issue a permit for the erection of such sign. Permits will not be necessary for signs to be placed on the walls of buildings and flat against such buildings where such signs do not exceed twenty-four (24) inches in height nor project beyond the lines of such building upon which same are proposed to be erected.

Permits will not be necessary for signs to be placed on vacant lots or buildings advertising the sale or renting of such lots or buildings on which they are placed, provided such signs do not exceed sixty (60) square feet in area.

Section 2. *Inspection of Signs.*—All signs for which a permit has been issued shall be inspected by the Department of Buildings when erected, and, if found to have been well supported, braced and constructed according to the provisions of this article, a certificate of inspection shall be issued by the said department, to the owner of the sign.

All signs attached to any building and larger than twenty (20) square feet, also all projecting signs larger than fifteen (15) square feet, shall be examined and inspected by the Department

of Buildings once a year as to their safety, and, if found to be well supported, braced and secured to the building, a certificate of such inspection shall be issued to the owner of the sign.

Should any such sign be found unsafe or insecure, the owner of the sign shall be required to make it safe and secure within 48 hours from the time of notification to that effect, in writing, from the Department of Buildings; and if said notice is not complied with within the time specified, the Department of Buildings shall cause the same to be removed at the expense of said owner.

For every such inspection, the owner of the sign shall pay to the Department of Buildings a fee of one (\$1.00) dollar.

Section 3. *Bond.*—Every person, firm or corporation engaged in the business of erecting or hanging signs shall annually file with the City Clerk a good and sufficient bond, running to the City of, in the penal sum of five thousand (\$5,000.00) dollars to indemnify, save and keep harmless the City of from any and all costs, damages or expense of any kind whatsoever which may be suffered by the City of because of negligence on the part of such person in the hanging or erecting of said signs.

Section 4. *Definitions.*—The term "Signs" shall apply to display boards or screens used as such having characters, letters or illustrations painted, enameled, written, cut or fastened thereon.

The term "Banner Signs" shall apply to all display signs painted, printed or written upon cloth or canvas, with or without frame.

Section 5. *Signs on Buildings.*—All signs attached to or placed flat upon a building shall be of metal, if more than two (2) feet in height or more than one hundred (100) square feet in area.

No sign of any kind shall be attached to or placed upon a building in such a manner so as to obstruct any fire-escape or any window or door leading thereto, nor shall any sign be attached in any form, shape or manner to a fire-escape.

No wooden sign shall be allowed on the inside of any theatre, nickelodeon or other like place of amusement or entertainment.

Section 6. *Swing Signs.*—No solid swing sign projecting over a public highway shall have a greater area than sixteen (16) square feet. Larger swing signs shall be constructed of open wire-work with letters or illustrations attached thereto.

No swing sign projecting over a highway shall have a greater area than thirty-two (32) square feet.

Section 7. *Projecting Electric Illuminated and Non-Electric Signs.*—All parts of any electric illuminated sign shall be of metal or other non-combustible materials. No transparent sign which is attached to and placed flat against a building shall have a greater area than seventy (70) square feet, and no part thereof shall extend more than eight (8) inches from the wall.

Section 8. (a) *Electric Signs.*—Class "A."

—Class "A" or Electric Signs shall be those signs the entire lettering of which shall be studded with electric bulbs. There shall be an average illumination of not less than four candle-power per each one and one-quarter (1 $\frac{1}{4}$) square feet of each side of the sign.

No part of Class "A" or Electric Sign shall in any way obstruct the full illumination of all the lamps on each side of the sign.

Class "A" or Electric Signs may have an area not to exceed seventy-two (72) square feet, and shall not be more than twelve (12) feet long, and the lower edge shall be at least twelve (12) feet above the grade of the sidewalk; and in no event shall the inner edge of such sign be more than two (2) feet from the building wall or property line, nor shall the outer edge of such sign (if 12 feet long) project more than fourteen (14) feet over the public highway from the building wall or property line; and if hung over an alley, the lower edge shall be at least fifteen (15) feet above the grade of such alley: Provided, however, that Class "A" signs may have an area not to exceed 200 square feet, but must be so suspended or hung that the lower edge shall not be less than thirty (30) feet above the grade of sidewalk. Signs of this character shall not be more than fifteen (15) feet long and in no event shall the outer edge of such sign project more than seventeen (17) feet over the public highway from the building wall or property line.

(b) *Combination Electric and Plain Letter Signs, Class "B."*—Class "B," or Combination Electric and Plain Letter Signs, shall be those signs sixty-five (65%) per cent of which are composed of letters studded with electric bulbs and thirty-five (35%) per cent of which are composed of plain or non-electric lettering or characters.

Class "B" signs shall have an average illumination of not less than four candle-power per each one and one-quarter (1 $\frac{1}{4}$) square feet of each side of the sign surface. No part of Class "B" signs shall in any way obstruct the full illumination of all the lamps on each side of the sign.

Class "B" signs may have an area not to exceed forty (40) square feet, and are not to be more than eleven (11) feet long nor more than four (4) feet wide, and the lower edge must be hung not less than twelve (12) feet above the grade of the sidewalk, and in no event shall the inner edge of such sign be more than two (2) feet distant from the building wall or property line, nor shall the outer edge of such sign (if eleven feet in length) project more than thirteen (13) feet over the public highway from the building wall or property line.

No sign shall be attached to or suspended from Class "A" or Class "B" signs in any form, shape or manner.

(c) *Illuminated Signs, Class "C."*—Class "C" Illuminated Signs shall be those signs, except signboards and billboards as described hereinbefore, which have visible electric bulbs placed around the border or surrounding the sign or are illuminated by means of electric lamps used in connection with reflectors, cast-

ing the light in a downward direction, and shall have the equivalent average illumination of not less than four candle-power for each one and one-quarter (1 $\frac{1}{4}$) square feet of each side of the sign surface.

Class "C" signs may have an area of not to exceed thirty-two (32) square feet, and the lower edge of each sign shall be at least twelve (12) feet above the grade of the sidewalk and shall not project over the public highway more than ten (10) feet beyond the building wall or property line, and shall not be more than eight and one-half (8 $\frac{1}{2}$) feet long nor more than four (4) feet wide.

(d) *Non-Electric or Non-Illuminated Signs, Class "D."*—Class "D" Non-Electric or Non-Illuminated Signs shall be those signs, except signboards and billboards, which have no illumination of any kind attached or connected thereto and shall be made entirely of metal. No permanent Class "D" sign shall be of a greater area than fifteen (15) square feet where it is to be hung at an angle from a building over a public highway, and in no event shall the outer edge of the sign project over the public highway more than six and one-half (6 $\frac{1}{2}$) feet out from the building or lot line; nor shall the same be hung so that the lower edge thereof is less than twelve (12) feet above the grade of the sidewalk or fifteen (15) feet above the grade of an alley.

Class "D" signs, constructed of wire or steel netting background, of not less than one and one-half (1 $\frac{1}{2}$) inch mesh, with skeleton characters or illustrations attached thereto, may be erected; provided, such signs do not exceed twenty-eight (28) square feet in area and so constructed so as to be at least fifty (50%) per cent open. In no event shall the outer edge of wire or steel netting signs project over the public highway more than eight (8) feet from the property line or building wall.

Section 9. *Illumination Requirements.*—All electric illuminated signs described herein must be fully illuminated at least six nights each week from not later than one hour after sunset until at least ten (10) o'clock p. m. This section shall apply to all projecting electric, combination electric and illuminated signs in existence within the limits of the City of

Section 10. *Number of Lamps to be Used on Signs.*—All signs referred to in Section 8 (a), 8 (b) and 8 (c) must have at least ten (10) lamps visible on each side of sign, and there shall be not less than sixty-four (64) candle-power on each of said signs.

Section 11. *Vertical Signs.*—Signs referred to in Section 8 (a) and 8 (b) may have a greater area than hereinbefore mentioned, but such signs of greater area shall not project over the public highway more than four (4) feet out from the building wall or property line, nor extend higher than the upper coping of that part of any building to which they may be attached.

Section 12. *Weight of Signs.*—No projecting sign of any class hereinbefore referred to, mentioned or described shall have a greater weight than 600 pounds, except vertical signs, the weight of which shall not exceed the weight of 1,000 pounds.

Section 13. *Sky or Roof Electric Signs.*—All Sky or Roof Signs, having the bottom edge placed twenty-five (25) feet or more above the ground or grade level, and all other Sky or Roof Signs over twenty-five (25) square feet in area, shall be made entirely of metal or other non-combustible materials.

All Sky or Roof Electric Signs of a greater area than 100 square feet shall be constructed of fabricated steel shapes or of wire netting on a metal frame. All such sky or roof electric signs must have electric characters, letters or illustrations thereon.

No Sky or Roof Electric Sign shall be placed so that the face of said sign shall come within three (3) feet of the inner plane of the outer wall of such building, nor shall it be constructed so that the bottom of such sky or roof electric sign shall be less than one (1) foot nor more than ten (10) feet above the surface of such roof; nor shall there be more than one Sky or Roof Electric Sign on the roof of any one building on each street front.

Section 14. *Supports and Anchors.*—All signs referred to in this article attached to or placed upon any building shall be thoroughly secured thereto by iron or metal anchors, bolts, supports, chains, stranded cable or braces. No staples shall be used for securing any projecting sign to a building. All Sky or Roof Electric Signs shall be constructed and braced to withstand a horizontal wind pressure of thirty (30) pounds for every square foot of surface exposed, from the ground to the top, including the roof.

Section 15. *Owner's or Sign-Writer's Name.*—All wiring of electric signs, and installations of same, switches, flashers, etc., must meet with the approval of the National Board of Fire Underwriters. All signs of greater area than one hundred (100) square feet shall have the owner's or sign-writer's name raised on a separate board, above the limit of height herein described, but such smaller sign shall not be more than twelve (12) inches high and its extreme length shall not exceed ten (10) feet, nor shall there be more than one (1) such sign for every single sign. On signs attached to buildings, the sign-writer's name may be painted thereon in lieu of the separate board herein mentioned.

Section 16. *Banner Signs.*—No banner sign of any character shall be permitted to project or be suspended across any public highway, and no person shall paint, print or nail any banner sign, any advertisement, or notice of any kind whatsoever, or cause same to be done, on any curbstone, flagstone, or on any other portion or part of any sidewalk or street, or upon any tree, lamp-post, hitching post, telegraph, electric light or street railway pole, telephone pole, hydrant, bridge, pier or upon any other structure within the limits of any street, within the City of and no person shall paint, print or nail any banner sign, handbill, advertisement or notice of any kind, or cause the same to be done, upon any private wall, window, door, gate, fence, advertising board or sign or upon any other private structure or building, unless he is the owner thereof, or without the

written consent of the owner of such wall, window, door, fence, gate, advertising board, or sign or other private building or structure. Provided, however, that nothing in this section shall apply to any notice required by the ordinances of the City of, or legal notices by public officers and attorneys in the manner and places prescribed by law, or to the circulation and distribution by any merchant of advertisements of his own business, or with the right of any daily newspaper to distribute its papers throughout the city.

No person, firm or corporation shall scatter, daub or leave any paste, glue or other like substance used for affixing bills upon any public sidewalk or pavement, or scatter or throw any old bills or waste material removed from billboards on the surface of any public street or highway or on the surface of any private grounds.

Section 17. Every sign now existing, whether erected upon or above the roof of any building, or attached or fastened to the wall or walls of any building so as to project over any public street, avenue, alley, lane or public highway, which is now erected or which is now maintained contrary to the provisions of this article, shall be forthwith removed or altered or changed, or cut down so as to fully comply with the provisions of this article; and any sign now existing and not complying with the provisions of this article which shall not have been removed or torn down or so altered and changed within six (6) months from and after the passage of this ordinance so as to be brought within the provisions hereof by the owner thereof or by the person, firm or corporation in charge, possession or control thereof, shall be torn down by the Department of Buildings, and the cost and expenses of tearing down such sign shall be charged to the owner, or to the person, firm or corporation in charge, possession or control thereof, and shall be recovered from such person, firm or corporation by any appropriate proceedings therefor.

Selling Electricity has received a number of letters from central station men commenting on the model ordinance and in some cases suggesting minor changes which in their judgment could be made to advantage. Several of these recommendations are well worth serious consideration by any central station engaged in the formulation of an ordinance.

The two criticisms which appear most often in this correspondence are: first, that the model ordinance is too long and too complicated to lend itself easily to explanation and demonstration. It is suggested that the ordinary city council is composed of men unfamiliar with these details, and that the specification of the candle-power

per square foot, for instance, would tend to create much confusion in their minds. The other criticism is, that too much space is devoted to the non-electric sign. In other words, the old style painted sign and the banner sign are apparently recognized as important factors in the sign situation. As one man expressed it:—

"I believe the Model Sign Ordinance covers too broad a field. Every effort should be made by central stations to discourage non-illuminated signs; especially those across the sidewalk, for not any of them are attractive and as a rule no effort is made to give them individuality. If the central station makes the effort, the 'city fathers' and influential business men can be convinced that the electric sign is the only proper sign to be erected.

"There is another point which is not covered in the model sign ordinance; that is, no curb post should be allowed to be erected for the hanging of signs where none now exists."

Another man, in supporting this contention, cites the present sign ordinance in force in the city of Meridian, Miss., which is exceedingly brief and recognizes only electric signs. This ordinance has proved most satisfactory to all concerned. "It may be necessary for such an elaborate ordinance in the large cities," this man says, "but for the smaller cities more can be realized in favor of the Class A electric signs."

The Meridian ordinance reads:—

No overhead swinging or hanging sign, over the streets, avenues, or sidewalks anywhere in the city are permitted, unless same be an electric sign, which shall be hung and installed under the supervision of the city electrician, at a place to be approved by the Mayor and Board of Council and Aldermen; and no electric sign shall be permitted to be put up across any street, sidewalk, or avenue unless both sides of sign shall be kept well lighted. All electric signs shall be put up in a workmanlike manner, and shall be supported with not less than 1-1/4 inch flexible steel cable, and supported from every direction, so as to be steadfast and free from oscillation, and under no circumstances will any post be allowed where none now exists. Any person, association, company or corporation who shall install or erect any sign in violation of the provisions of this

ordinance shall on conviction be fined in any sum not exceeding \$50.00.

Among the other suggestions, these seem to be pertinent:—

—"The ordinance proposes to make the minimum height over the sidewalk 12 feet, which would prevent the man who has a store occupying the ground floor only, from hanging a sign. This could be made lower to good advantage. Also signs projecting 14 feet over the public highway, I consider too far. It will eventually hurt the electric sign business."

—"The ordinance says, "No sign shall be attached to or suspended from Class A or Class B signs in any shape or manner—To have two iron rings to which can be hooked a neat little panel is sometimes a good talking point to interest the small merchant, these panels to read 'Xmas Goods' or 'School Supplies' and various other things. A merchant can have a dozen panels and mention his 'specials' on them."

—"I should suggest that all swing signs weighing 200 lbs. or more should be supported by two head guys, put up in such a way that should one prove defective and break, the other would sustain the entire weight. In the construction of electrical signs it is absolutely necessary that the framework be made of angle iron and the two faces bolted together; it is dangerous to make the facings of electric signs do the work of a frame."

—"It is specified in the model ordinance that no wood should be used in constructing electric signs. Why not except ornamental scrolls and moldings around the borders? This ornamentation, if of wood, should be at least 4 inches away from any parts electrically alive."

—"I notice that Section 1 states that permit will not be necessary for signs to be placed on the walls of buildings, but the first paragraph of the section reads 'No sign to be erected or altered without permit.' Isn't that a contradiction?"

—"Section 6 covers swing signs. I believe every sign, no matter what kind, should be guyed so as to allow the least possible vibration. Constant swinging will wear the hangers and especially during a wind storm will increase the danger of the sign falling."

—"In Section 8, part D, there is a provision made for the maintenance of signs which have no illumination of any kind attached or connected thereto. These signs are permitted to project as far as 6 1-2 feet out from the building or lot line, while under Section 9—Illumination Requirements—it says that 'all electric illuminated signs described herein must be fully illuminated at least six nights each week, from not later than one hour after sunset until ten o'clock p. m. This Section shall apply to all *projecting* electric, combination electric and illuminated signs in existence within the city limits of....' Therefore, if this sign did not project more than 6 1-2 feet out from the building, and if it were originally a Class A, B or C sign, could not the owner, by taking out the electric bulbs, have this classified under D and therefore maintain this sign without electric illumination?"

"Referring to Section 9, you will note that this stipulates that signs should be illuminated. We would suggest that it might not be a bad idea to add the following to this section:—'When in the judgment of the City Council of said city any such sign shall have been abandoned as an electric sign by non-use, it shall order the same to be removed within five days; and any person failing to comply with such order shall be deemed guilty of a misdemeanor. Each day that such sign shall remain after the expiration of said five days' notice shall be held to constitute a separate offence hereunder.' I have found from experience that occasionally a merchant, in order to get a sign out over the sidewalk, will purchase an electric sign so as to get around the ordinance. They have no idea whatever of burning this sign; so you will agree, I am sure, that too much stress cannot be put on this particular point."

—"Do you think that a provision for the weight of ice and snow—especially on inclined roof signs—should be included where same are erected in wintry climate?"

These comments were not tendered

in a spirit of dissatisfaction, but were all offered and they are here published as constructive criticisms which may be of real value to those central station men who are working to establish a higher standard of sign construction. The Model Sign Ordinance, as it was presented at the N. E. L. A. Convention, was the result of the very serious effort of many busy men and will serve as the basis from which to work. Wherever it is possible, of course, the electric sign should be established as the only legally recognized type, but in any event, the standard of construction can be so rigidly safeguarded that there will be a gradual evolution towards the most enduring and profitable—the metal electric sign.

DOLLAR IDEAS

An Alternative for Program Advertising

By L. D. GIBBS,

Supt. of Advertising, Edison Electric Illuminating Company, Boston, Mass.

When some church or fraternal organization with a prosperous membership importunes a central station company to take advertising space in a special or souvenir program, put this proposition up to them: Offer to pay whatever circumstances determine as a reasonable amount toward the expenses of the enterprise for which the program is being prepared. Then, instead of taking space in the program, or allowing the central station company's name to appear in any way, get from the interested parties a list of the members of the organization. Get also a letter of introduction from the highest officials in the organization bespeaking the courteous treatment and consideration of his proposition for a representative of the central station. Then take this list of names, mark off such as are present customers, and send an agent armed with the letter of introduction and list of non-customers into the territory as near as possible to the time of the entertainment for which the program is being prepared. The agent can tell in a modest way what the central station has done in the matter of the program, which gives the reason for his being there, and with the letter from "the high boys" of the church or organization the agent is certain to receive courteous consideration.



"The Best Sign-Lighted City in the World"

Why Montgomery, Ala., Can Make This Claim—and Prove it

Montgomery, Ala., boasts of being the best sign-lighted city in the world, and backs up this contention by pointing to the fact that in practically fifteen squares of business houses there are no less than 400 electric signs in use. The power for these signs is supplied by the Montgomery Light & Water Power Company, which maintains a separate sign circuit, giving control over the lighting hours.

A few years ago, little or no attention was paid by the merchants of Montgomery to this form of advertising, but through the efforts of the Montgomery Light & Water Power Company a campaign of education along these lines has been carried on with great success. The central station took the view that an electric sign which is well constructed, brightly lighted, and unique and original in design, is a form of advertising that appeals to everyone, and the prime factor in their work has been the planning of signs to suit the prospective customer's needs. Each case was carefully studied, and special designs and "sign ideas" were originated. Every customer was guaranteed a sign that would be in keeping with his especial line of business, and at the same time entirely different from every other sign in the city. As a consequence of this, Montgomery possesses some of the most original and attractive signs to be found in the country.

The Exchange Hotel sign, shown in the accompanying illustration, is a double-faced, horizontal sign, measuring 5 by 12 feet, and containing 224 4-cp. lamps. The words "EX-CHANGE HOTEL" are spelled in frosted lamps, the letters being designed to conform with the architecture of the building. Another good sign of this nature, but entirely different in design, is that of the Gay-Teague Hotel, which contains 186

4-cp. lamps, the letters being grooved, and making a most attractive and desirable sign. A comparison of these two shows how competitive signs were kept entirely distinctive and individual.

The Water and Light Company, at the beginning of its campaign, had to contend with a competition, a feature of which was the giving away of signs in return for the current used. They, therefore, put it up to the merchants, as to which they would prefer, a sign of no originality, free of charge, or a sign of character and adapted to their individual needs, for which a fair price was charged. It was found



Two Montgomery hotel signs. Showing the contrast that is maintained between competitive signs

that when the prospective customer realized just what he would be getting for his money, these methods bore much better results than those of the opposition.

One of the most striking signs designed by the company was the Empress Theater sign. The crown is set with jewels, represented by white, green, red, and amber lamps, and the effect is very striking. In the center, the words "MOVING PICTURES" are flashed on in red lamps, one letter at a time, then all off, and on again. The words "EMPRESS THEATER" are displayed in white lamps. The letters in this sign are grooved.

Entirely different in idea and design, yet equally effective and interest-compelling, is the sign of the Atlas Insurance Company. This is a roof sign, measuring 15 by 26 feet, and installed on the roof of a four-story

building. The figure of Atlas, bearing upon his shoulders a miniature world, is illuminated by white lamps; the center lamps in the world are white, while the border lights are red, giving the effect of a revolving globe, this effect being obtained by a flasher.



Two other unique signs in Montgomery

First, the words "STRONG AS THE WORLD" come on, followed by the name, "ATLAS INSURANCE COMPANY," then all out and repeat. Each letter in the word "ATLAS" is half red and half white lights, the words "INSURANCE COMPANY" being in white.

As a result of the Montgomery company's campaign, their sign salesmen in three months' time closed contracts for thirty-nine electric advertising signs, averaging from 100 to 600 lamps each, which is pretty good proof of the success of the campaign, and the fact that the merchants were not slow to appreciate and take advantage of the opportunity to have an original specially designed sign of their own,

at a moderate cost. One of the hardest problems that the Montgomery Company had to contend with in its campaign was that of interesting the wholesale merchants in electric advertising, as in most cases their locations were on a side street, and in a district where travel is light. Owing, however, to the fact that competition in this class of business is growing strong in Montgomery the wholesale dealers were brought to realize that, in order to hold old business, as well as to secure new business, advertising in an up-to-date manner was a necessity. Two large vertical double-faced signs were sold to wholesale drug and grocery houses, and together burn 610 lamps of 4 cp.

But the chief factor in the success of the campaign was probably the fact that the company considered, first of all, the benefits that were to be derived by the merchant, though this policy results, in many cases, in a smaller number of lamps in circuit than might have been secured by more aggressive but less far-sighted tactics. The most important thing, however, is to make the sign a profitable and satisfying investment for the customer, and the sign that is sold on the basis of its own individuality and merit appeals far more strongly to the modern business man than the most alluring of easy-to-buy bargains.

The peculiar competitive conditions which obtained in Montgomery during the course of the campaign, gave a practical test to this theory, which is most convincing.

Demonstrating the Electric Truck

Mr. C. A. Sunderland, commercial manager of the Colorado Springs Light, Heat and Power Co., has been arousing much local interest in electric vehicles of late by loaning a small electric truck to various Colorado Springs merchants for practical demonstration in making deliveries over their own routes and handling their own goods. The truck bears an appropriate placard, and is producing some interesting comparative figures.

Luminometers *vs.* Municipal Ownership

The Story of a Campaign of Publicity in Lincoln, Ill.

By Glenn Marston

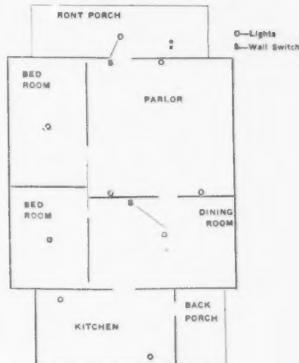
Amateur luminometers played an important part in deciding a recent municipal ownership campaign in Lincoln, Ill., when the contest finally culminated in a competitive display of the arc lamps proposed by both factions. Representatives of the Lincoln Water & Light Company secured permission from the city council to hang a chain of magnetite arcs around the City Square, and also some specimens of the lamps proposed for the municipally owned plant, which a few of the council were fighting for. The company then proceeded to lead the councilmen out o' nights, and let them gaze into pasteboard luminometers until they were satisfied as to the relative illuminating value of the various types of lamp which hung about the streets. The papers explained just what the councilmen were doing, when they gazed into the "much damaged shoe box," as one of the editors put it, and the public were also invited to come and make their own luminometer tests, which a few did. The difference in the lamps was so great, however, that the naked eye sufficed to convince most Lincolniters of the undesirability of a municipal plant.

Of course, the council had to have time to think it over, and we were glad of it, for that demonstration had sunk so deeply into the public mind, through the judicious aid of a little publicity, that about all we had to do was to sit back and let the populace tell the council what to do. The council signed a new lighting contract for five years and municipal ownership is at least that far off in Lincoln. The new contract was more satisfactory to the company than the old one.

While the council was deliberating, and pending the final signing of the contract, it was decided that a little commercial campaign, during the in-

termission, would be of great value to the company. On looking the field over, some interesting discoveries were made, and it was all placed before the

**We Will Wire Your House
Complete for Four
Dollars Down**



Now is the time for you to arrange for your wiring. Have it all done by the time your spring house cleaning is over. NOT that we will litter your house up, however; for we do wiring so that it will not inconvenience you in the least. By improved methods, we do not tear up your floors nor do we knock down your plaster. The presence of our men on your premises will be the only indication to you that work is in progress.

We will completely wire nine lights and two wall switches in any five room houses on our lines for \$4 down and \$1 per month thereafter for 11 months—a total of \$15. The same work will be done for \$13.50 cash.

Or we will do all wiring AND FURNISH ALL NECESSARY FIXTURES in accordance with the plan above—or any reasonable modification thereof—for \$4 down and \$2 per month for twelve months—a total of \$28. The same work will be done for \$30.

THESE BARGAIN PRICES on wiring combined with the new low rate of 7½ cents per month per lamp—allowing a reasonable amount for each lamp—brings ELECTRIC LIGHT WITHIN THE MEANS OF EVERY BODY.

Just think of it! Do your kerosene lamps cost you as little as 7½ cents a month each? Isn't the CONVENIENCE of electric light alone worth 7½ cents a month per lamp? Isn't the preservation of your EYESIGHT worth 7½ cents a month? Isn't it worth 7½ cents a month to save your wife the drudgery of cleaning and filling lamps? Isn't it worth 7½ cents a month to have the BEST LIGHT IN THE WORLD?

We will gladly send a representative to your house to make suggestions as to the best way of placing the lights. Every family has its own lighting problems. The above plan is only a SUGGESTION, and may be modified to suit the needs of the community.

Lincoln Water & Light Co.

The type of advertisement used in the Lincoln house-wiring campaign

people in the advertising space which had been purchased for the purpose of exposing municipal ownership.

It was found that the best lighting customers on the company's lines

were those whose individual cash sales were the smallest in the city, the picture show men, who get just five cents per customer; that the most prosperous clothing store had well-lighted windows, and that those windows had moved the Square's center of population from the northwest corner to the southwest corner. It was

the water and light company was doing for the advancement of the community, for though they had heard, of course, that the company had spent thousands in filter beds and new generators, it had made little impression. They felt about it just about the way we feel when we hear that J. Pierpont Morgan has bought

Do You Want To Mortgage Your Home To Deprive Us of Business

At the council meeting last night the Lighting Committee presented bids and estimates on the construction of a municipally operated distributing system. Whether they will RECOMMEND such a system remains to be seen.

We hardly think they will, when they investigate further and balance the POSSIBLE economies against the PROBABLE excess in expense. We all know that estimates on paper do not cover the total cost of ANY project. Now if the committee figures a possible saving of a few per cent over the cost of the lights under our bid, do you think the chances are that there will be any REAL saving after all the bills are paid and all unforeseen circumstances taken care of?

The Lighting Committee reported last night that it had received an estimate of \$12,000 for the construction of the distributing system. The Mayor at once began to figure on a basis of ~~10%~~ as being a liberal allowance for extras under such an estimate. When the city of Ashland voted on municipal ownership a short time ago, the "estimate" of the cost of the lighting plant—made by an engineer of the University of Wisconsin—was \$60,000. When BIDS were called for the LOWEST bid was \$105,000.

But let us do a little figuring on the basis of \$12,000, which is the LOWEST ESTIMATE of the cost of a municipal distributing system providing for 240 tungsten lamps of 250 watts each. Supposing the cost was kept down to \$12,000, as estimated by the Lighting Committee—what do we find the cost to the city per year to be?

Interest on \$12,000, at 5 per cent	3 600.00
Depreciation on plant at 5 per cent per year.....	600.00
Cost of electricity at 3¢, allowing for 100 all night	
lamps and 100 moonlight lamps, burning 2700	
hours per year	3796.00
Loss of current in transmission from switchboard	
(lime loss) at 10 per cent	576.00
Annual repairs (estimated at 5 per cent)	600.00
Sinking fund for retiring bonds in 20 years.....	600.00
Lineman, per year	720.00
Night man, per year	720.00
Lamp renewals, per year	1920.00
TOTAL COST	\$12,135.60
Cost of Street Lights under our bid, per year	10,380.00
EXTRA COST OR MUNICIPAL OWNERSHIP, PER YEAR \$1,755.60	

We have made NO ALLOWANCE, in these figures, for any of the countless extra expenses which may occur. There is no provision for extraordinary depreciation through lightning, for example, which may put the whole system out of business in an instant. There is no provision for damages against the city which may arise from many causes, such as death or injury from contact with wires, poles failing on vehicles, or otherwise destroying property. There is no provision for extra legal fees in defending the city against unjust claims. These are items which CANNOT be estimated, so we left them out. THE SHOWING IS BAD ENOUGH WITHOUT THEM.

If the city puts its money into a municipal plant, the plant must be paid for and operated out of the taxes. To be sure, you pay us for street lights out of the taxes, but when you contract with us you know the GREATEST AMOUNT YOU MUST PAY, while under municipal ownership you only know the LOWEST PROBABLE COST, with no knowledge of what the EXTRA cost may be. Do you want to pledge your home for taxes of an UNKNOWN amount, when you can be SURE of the amount if we do your lighting?

Lincoln Water & Light Co.

This advertisement was one of the most effective of the anti-municipal-ownership series

found that there were two hundred empty houses in town, owing to shutdowns at the mines; but that, of the two hundred, only five were wired for electric light.

The company had been so busy talking of the dangers of municipal ownership that it hadn't had much time to call attention to its own value to the community. The people of Lincoln had never before known what

another \$10,000 Bible. It's interesting, but it doesn't benefit us particularly.

Since the Lincoln Company is also in the wiring business, it seemed advisable to go after some of those un-wired houses, and to that end, an installment plan wiring proposition was figured out. From the advertisements shown here, it will be seen that the prices were not particularly low, for it

seemed best to do a good job at a reasonable profit and be sure of giving entire satisfaction. Practically all five room cottages in small western towns are identical in plan, so, in order to make our proposition impressive, the advertisement was headed with a plan

house-wiring was advertised again, and in those three days over \$200 worth of wiring business came in as a directly traceable result of that advertisement. After that the house plan was used again, with different copy—although the arguments were

What Mayors Say of Municipal Ownership

City officials who have had experience with municipal ownership are, as a rule, thoroughly disgusted with it. The only people they will not criticize is themselves. Ask any city official in a municipal ownership how the plant is run, and he will say something like this: "If I had MY way the plant would be run much better than it is."

We have secured the statements of a large number of city officials regarding municipal ownership, and will give the opinions today of some mayors whose experience has been sad and bitter.

In a city no further away than Galesburg, where municipal ownership has been in operation a long time, Mayor Shumway said, in demanding an investigation of the municipal plants there, "The city has more money invested in it than in any other plant. The people are vitally interested therein, but, from the foregoing statement, as a business proposition, it is a sad failure."

In Easton, Pa., they have had a municipal plant since 1888. Mayor March has recommended its sale, and admits that it has not been conducted with economy or with ordinary professional acumen. The local lighting company has offered to do the street lighting for \$15 per lamp less than the present cost to the city, and it is probable that the plant will be abandoned in the near future.

The city of Xenia, Ohio, tried municipal ownership, and this is what Mayor Brennan has to say about it: "The city paid upwards of \$21,000 for a light plant, and the cost of running same was at the rate of \$103 per lamp. The plant was badly run, the operating of the same being in the hands of a committee of councilmen, who were inexperienced, and of course, drawing no salaries, did not give it the proper attention. ALL THEY GOT OUT OF THE SALE WAS \$2500."

The village president of Waddington, N. Y., wastes no time in his opinion of municipal ownership. He says, "The property was sold for \$3,000; cost \$6,000; 5 years used. The village was sore on the property."

The mayor of Fulda, Minn., says: "Our plant was not sold, but given away in 1902; but the deed was not executed until five years later, as according to contract, the present owner was to run it for

five years in payment for it. The reason for giving it away was that it ran behind about \$1,000 every year." The plant cost \$10,000.

In Christiansburg, Va., an electric plant was installed in 1900 for \$10,000. In 1907 the generating plant was shut down and power purchased from a private company. In January, 1903, THE DISTRIBUTING PLANT WAS SOLD, the experiment having proved very expensive. The mayor says, "Christiansburg is bettered financially, and we are sure that we have made a good deal for our town."

This is what the mayor of Brunswick, Mo., says: "Brunswick about twelve years ago built an electric light plant and water works, and about a year and a half ago was very happy to be able to sell the same for about 35 cents on the dollar of cost, taking the pay in light and water service. The ownership of the plant ran the city into debt very much, and the service was not nearly so satisfactory as it is now under private ownership; nor was it any cheaper. Our city is now beginning to crawl out of debt, made by owning the light and water plant. You could not GIVE BRUNSWICK such a plant under the condition that the city should run the business."

Concerning the municipal gas plant at Bowing Green, Ohio, the mayor says: "Our city 'daddi' went in at \$60,000, and sold out to the company three years later at one-tenth the cost of the speculation—\$6,000. The bonds have been drowned in interest, and some are still unpaid. It was a very poor venture for the city."

These are opinions held by city officials who have BEEN THROUGH THE MILL of municipal ownership. WOULD IT NOT BE WELL TO HEED THE GREAT VOLUME OF TESTIMONY RESULTING FROM PRACTICAL EXPERIENCE WITH MUNICIPAL OWNERSHIP, INSTEAD OF TRYING TO EMBARK ON SUCH A VENTURE WITH PAPER ESTIMATES OF POSSIBLE SAVINGS, WHICH HAVE ALWAYS VANISHED WHEN PUT TO THE ACTUAL TEST?

Lincoln Water & Light Co.

Come to Our Office To-Night and Make Your Own Test of the Street Lights

This "copy" was also particularly convincing. It gave the public real facts and figures that were believed

showing a typical wiring scheme. It was assumed—and the assumption proved correct—that each tenant or landlord who had a house of that plan, would apply the suggestion to his own house.

There are two daily papers in Lincoln, and the advertisement cost \$3.00 in each of them. After the first insertion, three days were passed before

about the same—and it kept on bringing good results. The second week the advertisement was put into smaller space, leaving room for only a little reading matter, and it continued to "pull."

Unfortunately, it was impossible to advertise power during this time, though the power load was capable of considerable improvement. The in-

stallation of new machinery, including a change of frequency, which was to take place two months later, made it inexpedient, for there was no profit in interesting power users only to tell them to come back again in a couple of months for service. So the campaign was confined to lighting.

It was found that many stores were wired for window lighting, but did not use the lights because the proprietors were unwilling to come down town at midnight to turn the lights out, and too economical to let them burn all night. An attractive proposition for window lighting, on a flat rate basis, worked out, and the next time the night police force came in for a new "bug-light" battery, an arrangement was made to have the lights turned off at ten, eleven, or twelve o'clock, at a cost of 25 cents a month, per store. This offer brought much business, although most of the merchants who took it up remained on the meter.

During the weeks preceding the settlement of the lighting controversy, the citizens of Lincoln decided to form a commercial club. The company entered heartily into the movement, and the canvassing committee, headed by Mr. Emmett MacDonald, the general manager of the Water & Light Company, although its district was considered a poor one, secured the largest number of members. A dial recorded the increase in membership, and at every addition of ten members the fire and mine whistles were blown. In one day the membership reached 358. In order to show its interest, the company devoted two or three entire advertisements to the commercial club, and placed in the top and bottom rules of every advertisement the words, "Have you joined the Commercial Club?" This activity of the company produced much favorable comment on the part of the promoters of the club, which included all the leading merchants and professional men of the city.

The principle of every public service company is to have as few outages as

possible, and the Lincoln company, though operating in a small town, has been exceptionally fortunate in the continuity of its service. Of course, there was an outage during the street lighting controversy, but it was turned to good account, and the manner of handling the news end of the affair showed how even an accident can demonstrate the company's usual good service.

The special new business advertising lasted only eight days, yet the direct results were sufficient to pay all costs several times over, including the cost of preparing advertising matter. This eight-day campaign shows what can be done, even in a town of 10,000 people, when the central station becomes aroused to the possibilities of profitable publicity. Much more could have been accomplished if the advertising campaign could have covered power as well as light, and if all the attention could have been concentrated on new business instead of being divided between councilmen and customers.

General Manager MacDonald is a firm believer in advertising and the company regularly uses a 10-inch double-column space, three times a week, in each of the local papers.

Coal Oil vs. Electric Street Lights Demonstrated by Vehicle Power

Here is the story of a most ingenious and convincing demonstration of street lighting by electricity, as compared with coal oil lamps, and with an electric truck playing the part of substation. The reproduced photograph shows one of the regular vehicles of the Dayton (Ohio) Power and Light Company, doing night duty in one of the small neighboring villages, and operating from its regular battery a 60 c.p., 75 watt, series, Mazda lamp, to show the people of the village just how electric lights would improve the illumination of one of their own important street crossings.

Mr. A. H. Hutchings, superintendent of the Dayton Power & Light Company, tells the story thus:

"One of our neighboring villages, located approximately ten miles from our lines, is very desirous of having us extend our service to that point, and as they are particularly interested in lighting their streets and thoroughfares, we thought we would demonstrate the results that would be obtained so there would be no possibility of disappointment should the system be adopted. We, therefore, installed one incandescent lamp, suspended above the street on a prominent corner in the village, and operated this lamp by means of the batteries used for propelling one of our electric vehicles.

"This picture was taken the first night, and the other light on the short wooden pole near our truck shows how our exhibit compared with the present village lighting equipment, which consists exclusively of coal oil lamps.

"The result of our demonstration proved to be entirely satisfactory, for



The electric truck operating the street light demonstration

we secured a twenty-five-year franchise, as well as a ten-year contract for the village street lighting. The enthusiasm shown convinces us that we will also obtain an amount of residential business that will prove very satisfactory to us."

An Electric Band Wagon

The Leavenworth (Kansas) Light, Heat & Power Company has an electric "band wagon" which has been working in the interests of a house-wiring campaign. It consists of one of the company's regular electric delivery wagons, outlined with Mazda lamps, and equipped with signs, banners, and



The Leavenworth "band wagon" that worked in the house wiring campaign

a Victrola phonograph, as shown in the photograph taken in front of the company's office.

This vehicle was used in a campaign for house-wiring and carried the salesmen through the residence and business districts, making evening calls on prospects. On one side was a sign reading, "Electric Christmas Gifts are Ideal." The other side read, "Is Your House Wired?" The sign on top said, "Increase the Value of Your Home by Wiring It for Electricity." The Victrola was in constant operation and attracted much attention. Mr. Duncan, the commercial manager for the company, reports that very gratifying results were obtained in the shape of actual orders booked. The "band wagon" campaign was strongly supported through the local papers.

Thirty Blocks of Decorative Arches

By JOHN H. PETERSON

Manager New Business Department Menominee and Marinette Light and Traction Company, Menominee, Mich.

About two years ago one of Marinette's prominent business men, a director of the local Chamber of Commerce, had occasion to visit a nearby city, where a system of decorative arch street lighting was in use. He returned to his home city very much enthused over this type of street lighting, and, after some agitation on his part, supported by the local press and our company, it was decided to erect arches covering the main business section, or approximately 15 blocks in each city, and placed about 120 feet apart, and about 25 feet above the pavement, each arch containing ten 25-watt Mazda lamps.

In Marinette the proposition was financed by the local merchants—

again put in service the following May, financed to burn until New Year's, though at the end of each term the subscription had to be resorted to. But our merchants soon began to



How the arches look in Menominee



On the main street in Marinette

through a committee which called on them with a petition asking for monthly contributions for a period of six months, ending January first. After the first of January, however, the lights were unused, but they were

realize that it is as essential for them to have these special street lights during the first half of the year as it is during the last half, and we signed a contract with them to burn the arches each and every night, from dusk till midnight. We got a flat rate per month, which was based on a six-hours' burning per night at five cents per kw.; this monthly payment, however, was large enough to cover the installation and renewals, and after the installation had been paid for, we reduced the price per month.

In Menominee the conditions were practically the same, with the exception that the City Council paid for the original installation while the merchants pay for the current. Menominee



The Marinette, Wis., slogan sign

has followed Marinette in burning these lights every night, the year around. All our sign and display lighting, as well as our flat-rate window lighting, is connected to this circuit, which we consider very favorable, as it does away with our having to patrol the signs. The circuit in each city is controlled from the local sub-stations, going on at dusk and off at midnight.

We figure all our flat-rate window, sign, and display lighting at 2,200 hours' burning per year at five cents per kw., connected, and bill the year's contract in 12 monthly installments.

Union Company Presents Slogan Sign to St. Louis

Some time ago, the citizens of St. Louis decided that the city needed a slogan, so, in order to get the best possible suggestions, they held a public contest. No less than 85,000 slogans were submitted, and from this collection a committee, composed of seventeen prominent business men of the city, finally selected this one: "St. Louis Has The Goods."

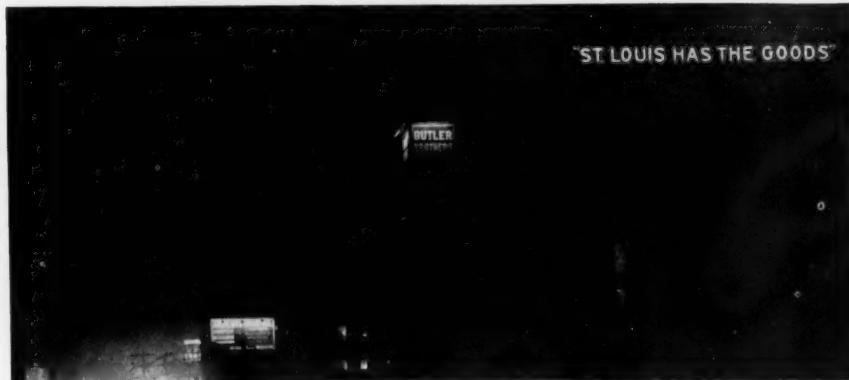
The new slogan was at once put to work advertising the city in newspapers, magazines and other mediums, one of the most effective of which was that furnished by the Union Electric Light & Power Company. This company donated to the city a flashing electric sign, which is located on the roof of the old Armory Building, at Seventeenth and Pine Streets, in St.

Louis. This sign is composed of letters four feet high, standing fifteen feet above the roof of the building, and occupying a space eighty feet long.

The sign is 150 feet above the ground, and is visible from all trains, as well as a long distance down the river. The words in the sign are flashed on separately, until the complete sentence is on, this being left lighted a moment or two, when the operation is repeated. When the sign was presented to the city, it was turned on for the first time in the presence of the mayor and other prominent city officials, members of commercial organizations, and the slogan committee, all of whom spoke in terms of high praise of the Union Company's progressive spirit in presenting the sign.

Decorative Street Lighting For Niagara Falls

Niagara Falls, N. Y., recently celebrated the completion of a "White Way" of which the city is justly proud. The installation embraces the blocks in Third Street between Falls Street and the bridge, and consists of Morris Iron Company's posts equipped with five tungsten lamps inclosed in globes. The Third Street Business Men's Association was largely instrumental in securing the illumination. When the lights were turned on for the first time, the event was marked by a parade and speeches by prominent citizens.



The new St. Louis slogan and the sign donated by the Union Electric Light and Power Company

A Village Entertainment to Buy Street Lighting

Out of the village of Coventry, Connecticut, comes a new idea for the financing of street lighting. Coventry is a small village in one of the country districts served by the Rockville Gas and Electric Company, and for the last year its streets have been lighted by incandescent lamps, the installation having been financed by popular subscription for the first year. But the year was about up, and no funds were

COMING

SAT. NOV. 18, 1911,

* AN *

ENTERTAINMENT

IN CONGREGATIONAL CHURCH, SOUTH COVENTRY,

* GIVEN BY THE *

GENTLEMEN OF COVENTRY

Program consists of a DEBATE by 4, MUSIC by Orchestra and selections by Male Chorus, Mr. W. A. TUCKER, of Woonsocket, Soloist, Oyster Supper and Social.

ALL FOR 25cts. CHILDREN UNDER 14, 15cts.

Proceeds for

Electric = Street - Lights.

SUBJECT FOR DISCUSSION.- Resolved that Women should be Granted Equal Suffrage with the Men.

Affirmative	Negative
Judge CURTIS DEAN	W. L. HIGGINS M. D.
Prof. A. E. PETERSON.	Hon. C. W. LEE.

JUDGES TO BE ANNOUNCED LATER
DOORS OPEN AT 7ENTERTAINMENT 7-30

available; the poster reproduced here-with shows how the issue was met.

Mr. William M. Lewis, manager of the Rockville Company, says:

"Coventry is about five miles from our generating station, but in a district where we have no distributing lines, except this street lighting circuit, tapped off a 23,000 volt high-tension line which passes nearby through the country. My predecessor, Mr. Slade, secured this business with 40 candle-power incandescent lamps after sufficient money had been subscribed to cover the first year's lighting, but since then it has always been a question as to how the lights were to be paid for, inasmuch as the municipality itself

(town government) never made any appropriation for these lights from the annual taxation. An old-time resident of this district recently took hold of the matter for us and aroused considerable interest. Strangely enough, our good friend is not one of our customers but uses acetylene for light, though his installation had been made prior to the time electricity was installed in this district. You will note the quaint wording of the announcement, 'Gentlemen of Coventry'; if the date of 1911 was omitted one might think this notice was printed during the Revolutionary days.

"The entertainment was a success, and the lights are safe for another year."

Ripening Bananas by Electricity

An electric radiator or air heater is used successfully to ripen large numbers of bananas by Leisman & Company, a fruit and commission house of Louisville, Ky. This firm formerly occupied a building with a fruit dealer who used gas to heat his ripening cellars, and one day the gas exploded and wrecked the building. After this, the Leisman Company determined, when it added a banana department to its lines, to find a safer method of ripening its fruit. They accordingly tried electric radiators, which have proved highly satisfactory.

The ripening cellars consist of two rooms, the ceilings of which are supplied with eighty hooks, each capable of holding a bunch of from 150 to 225 bananas. These bunches weigh from 60 to 90 pounds each. A Simplex resistance-type air heater, consuming from 1200 watts to 900 watts at its three temperatures, is placed on a zinc mat on the floor and keeps the temperature of the room at the desired range of from 60 degrees to 80 degrees, Fahr. The heater is operated continuously, excepting during the very warm summer months, when artificial heat is not needed. The average monthly consumption is about 500 kwh., for which the central station at its 5-cent rate receives about \$25.00.



JANUARY, 1912

THE FARMER AND THE CENTRAL STATION

At a recent meeting of the Executive Committee of the Commercial Section, National Electric Light Association, it was determined to revise a previous decision and re-establish the Committee on Electricity in Rural Districts. This was far-sighted action and reflects credit upon the Commercial Section. It cannot be denied that anything like a general adoption of electric service in rural districts is as yet a very vague dream, and the problems of the moment are so large and pressing that it seems like searching for trouble to further widen the scope of the Section's work at this time; yet, there is every indication that rural electric service is going to show greater progress within the next several years than any other branch of central station development.

Already we have had isolated cases where the business has been connected in considerable quantity and at a good profit. In the Illinois Convention last fall, several papers on the subject were presented, and received special consideration. Similar papers have appeared at intervals for several years, and the holding of the next annual

N. E. L. A. Convention in the far west is an added incentive for keeping abreast of this development, because it is the west which shows the most advancement at present, as well as the largest promise for the future.

But other considerations enter. The farmers, as we all know, are a particularly prosperous class. They are buying automobiles, and pergolas and high-grade nursery stock for the decoration of their grounds. Cream separators, patent churning, and a wide variety of labor-saving farm machinery are too common for comment. The next step is logically the adoption of electric service.

Machinery manufacturers, with experience in the alfalfa belt, have not been slow to see the opportunity, and half a dozen have entered the field with small lighting sets, which they are selling on a mail-order basis. One concern was credited with building 50,000 of these units during 1911, and other figures, equally large, have been applied generally. Allowing a good discount for exaggeration, it is not improbable that upwards of 100,000 will be marketed annually after 1912. This means an annual 100,000 central station prospects practically eliminated, or at best moved back into the future several years. But it means more. These plants are usually low-voltage affairs and all the equipment installed in connection with them is useless for central station current. The manufacturers, being unrestricted by standard wiring rules and facing very little danger because of the low voltage, are teaching the handy man on the farm to become his own wireman, so that the farms and suburban estates where these units are installed will be cluttered with makeshift

installations, which will be an added barrier against central-station service. It is evident, from this fact alone, that the Commercial Section is not moving any too promptly in its effort to popularize central-station service in rural districts. Delay now means greater difficulty later.

Not the least of the Rural Districts Committee's work will be the education of central-station men. We, of the industry, must learn both the advantages of such service to us and how best to combat the growth of the isolated plant—and especially the growth of makeshift and low-volt equipment. It is going to take considerable argument to prove to some of us that something ought to be done now, today. There is going to be a good deal of procrastination. But if the Committee can stimulate all to enter this field, by showing where and how others have succeeded in selling electricity to the farmer at a profit, it is going to be the most important work yet undertaken by the Commercial Section.

EXAMPLES OF SUCCESSFUL MERCHANDISING

The February issue of SELLING ELECTRICITY will be devoted almost exclusively to the subject of electrical merchandise.

There has been a wide variety of opinion expressed as to the practicability of the appliance policy advocated by this paper. Briefly, that policy is: that a central station or an electrical contractor can and should handle appliances upon the same sound merchandising basis as household utensils or hardware are handled; that all the costs of transportation, investment, depreciation, selling, and advertising

should be charged against goods so handled, and that above this the retailer is entitled to a reasonable profit.

Some central station men say the idea is absurd—to which we will reply by citing next month an example of a good-sized plant in an average inland city paying all the expenses of its commercial department out of the net profits on appliances. Some contractors claim that the appliance business is a "side line"—to which we will reply by showing how this "side line" has become the balancing factor in many an otherwise fat-and-lean contracting business.

The subject is one of larger importance than the mere profit percentage upon a few appliances. It is larger, even, than a question of business ethics. It is a question involving the future of the electric appliance business, and it affects vitally the market for electric current, which we expect to sell to operate those appliances. As such, it is a question deserving of immediate and candid study by all who care to look beyond the day's work.

OVER 10,000 N.E.L.A. MEMBERS

It was announced at a recent meeting of the Executive Committee of the National Electric Light Association that the total membership has passed the ten thousand mark, the actual figures being close on to 10,150. When it is remembered that only as recently as July, 1909, the membership of the association was under 3,000, the true significance of these figures becomes apparent. The work of the association is broadening out in every direction, and arousing new energy and enthusiasm in all parts of the country, and it is estimated that the enrollment may well be expected to pass 25,000 within the next few years.

ELECTRICAL MERCHANDISE

A Department of Suggestions for Men Who Sell
Current Consuming Appliances and Accessories

A enormous popular market for electric appliances and fittings stands awaiting the contractors, the supply dealers and the central stations who will study and utilize the experience of the successful merchants in other fields. It is the aim of this department to suggest and apply such proven methods for the upbuilding of this retail business in electrical merchandise—

not by indefinite theory or destructive criticism but by helpful, practical, constructive ideas for displaying and selling in the Electric Store. Contributions and communications of interest to this department will be gladly received. Address, Manager of Merchandise Department, SELLING ELECTRICITY, No. 17 Madison Avenue, New York City, N. Y. Telephone: Madison Square 7629

Know the Answers!

Suggested by a Few Incidents at a Recent Electrical Show

It happened at a recent Electrical Show in one of our larger cities, and it is well to state in advance that the incidents to be quoted are absolutely true and unexaggerated. Moreover, the cases are not unique in the industry, for there is hardly anyone who cannot recall similar experiences, every one of which is costing money in impeded sales.

Two women went to an Electrical Show and made the rounds, examining each exhibit and discussing the many personally interesting devices on display. One of these ladies is well informed on electrical matters, the other was intensely interested, but unacquainted with conditions; in other words, she came to the show with the same mental attitude of the general public, the enormous popular market which the Electrical Show was designed to attract and inform. Some of their experiences were surprisingly discouraging.

They stopped before a large booth occupied by one of our most prominent manufacturers of heating devices. There were quantities of apparatus on display, well arranged and most interesting, and several men and women were on duty within the booth, selling goods and answering questions. One of the two ladies spoke to a young

saleswoman and inquired as to the price of a percolator.

"Let me see," the attendant answered. "I'm not quite sure. I think they are worth about \$11.50. I'll find out." Then, "Oh! Mr. Jones," she called to a man who was busy at the other side of the booth. "Are we selling these percolators 'ten off' or at list?"

"Sell 'em at list," he called back.

"Then it will cost you \$13.50," said the girl, turning around, and, as if in a last effort to make things worse, she added, "Sometimes we sell 'em at ten off, so I wasn't sure."

Our friends passed on, feeling that this was no place to buy a percolator.

Incident No. 2—They stopped later on at a very complete and captivating exhibition by the local central station, a model electric house, completely and cleverly appointed, not overdone and in good taste, a practical demonstration of what modern electric service can accomplish in any home. After wandering through the various rooms and examining everything of interest, these two ladies were about to leave through the kitchen exhibit, when in came a stranger, an elderly woman, apparently in good circumstances, who began to inspect a washing machine which was in operation. But

the attendant was engaged in conversation with another girl, a personal acquaintance, and showed little desire to attend to business, and her interest was obviously not centered on her work.

The elderly woman was in earnest, however, and persevered. "Where do the clothes go in?" she asked.

"Right where that hinge is," said the girl, pointing her finger in the general direction of any part of the machine.

"How much can you put into the machine at one time?" was the next question.

"Oh, five or six sheets," said the girl, over her shoulder, "and half a dozen napkins or so. Take one of those booklets. It will tell you all about it." And the elderly lady took a booklet and passed on.

Again our two friends paused at an exhibit of reflectors. The salesman was talking to a man who looked like a prosperous merchant, and had just told him that their new type of reflector, which he held in his hand, was much more efficient than the old.

"You're wrong there, Bob," said another salesman, who just stepped up. "They are not quite as efficient."

"What do they cost?" asked the man.

"Well, I really don't know. They are just out and we haven't been selling them yet, but I think the price will be about 10 per cent higher than the old style."

And that man passed on, and our two friends left that show with mingled emotions.

Manufacturers of electrical current-consuming appliances are spending, year after year, hundreds of thousands of dollars in advertising and in personal sales efforts in the endeavor to arouse public interest in their product—then why, oh! why, do they confront that public with imitation salesmen, men and women who don't know the answers to the simple questions the public asks?

A Suggestion for the Contractor

Looking at the Sign Business from a Different Angle

The electrical contractor is making a mistake in not paying more attention to electric signs and sign equipment. Most contractors, of course, will reply to this that they are not in the sign business and don't want to be, because it takes too much sales effort to sell signs, unless a man specializes. And there are several other good general arguments, from his present point of view; yet, there is another side to it.



A recent and clever sign for a woman's outfitting store. The scarf and the plumes appear to wave in the wind

How about his own customers, the merchants he knows, the men who know him and trust him? Is he not in a position to sell his own people at a far smaller selling cost than the regular manufacturers' representative, who nevertheless does sell them signs and makes a profit at it to boot? It cannot be doubted, when we consider that

FEDERAL

1902
—
1912

Ten years' experience in building all-steel electric signs is at your disposal every time you write for a Federal sketch or quotation.

Ten years' reputation for the highest sign quality is behind every Federal Sign you buy.

Reputation for good signs is as valuable as reputation for good merchandise of any kind. May we add ours to yours on your 1912 Sign business?

Federal Sign System (Electric)

501 Home Insurance Bldg.
Chicago

*Write for New Display Sign
Bulletin No. 256*

FEDERAL



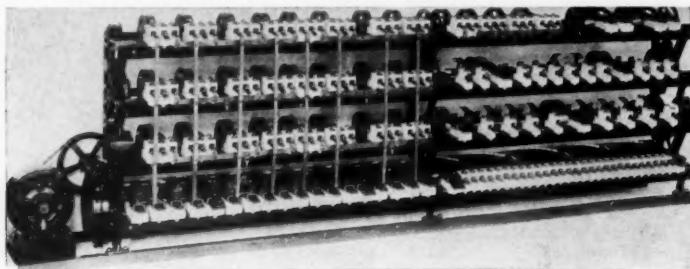
*NEW YORK'S FOREMOST DEPARTMENT STORE
INSTALLS A FEDERAL SIGN*

the local contractor is far better equipped to judge as to what that merchant really needs and what he can afford to pay per month to operate that sign. And right there is the opportunity.

When selling an electric sign is put on the basis of selling service, the selling cost need be no higher in its ratio to net profit than it is in any other service the contractor sells, for it is the same proposition. Don't go to the

efficiency. Then go to your friend, the merchant, and you can show him that his old sign is absolutely wasteful of money, since he is paying the same monthly current bill that will operate this larger, more forceful, far-reaching and appropriate sign. Any electrical contractor can do good business in electric signs, if he handles it from this angle.

And every sign sold in this way carries several sources of sure profit; it



An advanced type of modern flasher construction. It operates a San Francisco sign, with dancing bear and whirling circles

merchant and say, "Here's a better sign I want to sell you. It costs so much." Figure out what he is paying per month for his present sign, if he has one, or what he can well afford to pay, and put it up to some good sign manufacturer to work you up the best piece of electric advertising *for his particular business* that can be devised. The first cost of the sign is not half so important as that it should consume only about the same amount of current as the old sign, and by the use of a flasher, low voltage lamps and color caps, the actual value of that sign may be multiplied ten times in advertising

sells the sign, the flasher, the transformer, the lamps, the color caps, and the wiring, and on every item the contractor has his margin. The opportunity for such business among present customers and present sign users cannot be questioned, for modern sign and flasher combinations are making it possible to offer signs of an individual application that are well nigh irresistible to the merchant.

The accompanying reproduction of a recent sign, built for a woman's outfitting shop by the Yoerger-Butterworth Sign Company of Columbus, Ohio, is a good example of what can be

Electric Signs and Accessories

Send for our list of fifty standard and special signs ready for immediate shipment at reduced prices



Showing Revolving Wheel Effect

HALLER SIGN WORKS, Inc.
704 South Clinton Street
Chicago

done with a small sign. And a good illustration of the scope of the modern flasher is shown in this picture of a mechanism just completed by Betts & Betts of New York, to operate in San Francisco. This sign will advertise electric signs, and is made up of a vertical series of whirling circles, enclosing the letters, and surmounted by a large dancing bear. It is operated by a 1-15 hp. ac. motor.

There is profitable business awaiting the electrical contractor who will sell electric signs on the basis of service.

Interesting New Floor Polishers

Another interesting piece of electrical merchandise has recently come on the market in the shape of a portable electric floor scrubbing and polishing machine. It is operated as shown in the illustration, and will scrub any kind of a floor at the remarkable rate of 150 square feet in a minute, or as fast as the operator can conveniently walk up and down the room. It covers a space twenty-seven inches in width, and sprays the water on the floor automatically from the tank on the handle.

While there have been many inventions for scrubbing floors this new one called the E-Z Renovator and Polisher, has many exceptional features. Not only is the E-Z a valuable labor-saving device for renovating and wax-polishing wood floors, but a heavier and more powerful machine is also built on the same principle for grinding and polishing marble, cement, terrazzo, and composition floors. The machine is made both single and double, one of the latter doing as much work, and with better results, than fifteen men, skilled in the art, can accomplish in a day. This grinding is done by using carborundum blocks, attached to a revolving disc.

The entire machine consists of a 1-4 hp. motor, mounted on a shell containing a revolving base, and to this is automatically clamped a disc or brush, as may be required. By means of special ball bearings it has been

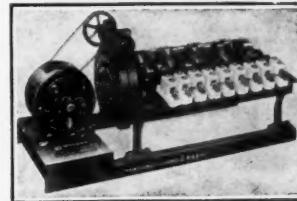
Central Stations

Insist That Your Customers Get

New York Flashers

(Patented)

With the Exclusive **KILARK PICUP BLOCK**



Cost No More Than Ordinary Flashers
Simple Durable Compact

Flashing Changes Instantly Made

COLOR CAPS.

Patented 1905-1911



STYLE A



STYLE B

Natural Colored Glass

**Why Use Expensive
Colored Lamps?**

Dipped Lamps Won't Last

Leading Sign Manufacturers

Use COLOR CAPS.

Because They're Practical

BETTS & BETTS

304 West 53rd Street, New York, U. S. A.
BOSTON OAKLAND LONDON
PARIS BUENOS AIRES



Bettering the Banner Lamp

The Banner Lamp is Better because the facilities of the largest and best equipped development and engineering laboratories have co-operated to make the output of our factories as nearly perfect as modern science, invention and industrial organization can make them. You will always know the Banner Lamp by its betterness.

Banner Service stands perfected—the outgrowth of years of upbuilding within our organization. Service has been the secret of Banner Satisfied Customers. Service in delivery, in engineering, advice, in attention to details of correspondence and adjustments; these and Better quality lamp are our bid for your lamp business.

Let us show you Banner service, let us demonstrate Banner quality—if you will do this, you will greatly favor us—we desire only to show you.

Banner Electric Co.
Member National Electric Lamp Ass'n.
Youngstown, Ohio

possible to use the small motor, which enables the operator to attach it direct to any incandescent lamp socket.

In European and other foreign countries much more attention is given to the care of the wood floors in the galleries, palatial residences, and public buildings than is customary with us, and the old methods are still



The Herr Floor Polisher at work on mosaic

in vogue for wax-polishing the "parquetry" with brushes attached to the shoes of the servant, who moves over the surface as one would skate, brushing out the wax, and producing a high polish. Of late years, however, we have been laying in our new and handsome buildings, floors of better wearing quality, composed of cement and marble in various forms, which has to be ground to a smooth surface and polished like glass. The old methods of hand-rubbing and polishing these floors with a "holystone," attached to a pole, are gradually being replaced by grinding machines, electrically operated, which accomplish some four hundred square feet in a day, compared with thirty-five feet by hand methods.

The accompanying photo illustrates the double scrubbing machine at work

on a mosaic floor. The brushes revolve in opposite directions, making the machine extremely easy to move and control. The motor is started without load, after which the handle is raised, withdrawing the caster supports from the floor, and allowing the full weight to rest on the disc or brush. These casters also give the operator instant control of the machine. The bodies of the machines are flexibly connected to the iron handle, allowing the brushes to adjust themselves to the curvatures of the floor. It will scrub right up to the base.

This machine is manufactured by the John Herr Manufacturing Company of Philadelphia, Pa., and has been in general use for a long enough period to have thoroughly demonstrated its practical utility. The electrical merchant should find a good market for these machines.

Electric Toasters Economical for Restaurants

In an address before the Michigan Electric Association, recently, Mr. J. D. A. Cross, heating specialist for the General Electric Company, illustrated the advantage of using electric toasters in restaurants by the case of a restaurant in Pittsfield, Mass. This establishment formerly used a gas-heated toaster at a cost of 35 cents a day, using dollar gas. It now uses a 3500-watt electric device costing but 10 cents per twenty-four hours, at 8 cents per kWh.

Six slices of toast per minute, or 360 per hour, can be prepared on the electric toaster, and an average of from 200 to 250 slices are served in the course of twenty-four hours. The consumption averages 10 watt-hours per slice of toast, and the proprietor is highly pleased with the toaster, which he says operates 60 per cent faster and is cleaner and handier than the gas toaster. This particular toaster increases the income of the central station from \$3 to \$10 per month.

"American Electric Ironing"



Here is the youngest electric iron on the market. It is made by the oldest manufacturers of electric heating devices. This new iron is known as

"American Beauty"

weight is $6\frac{1}{2}$ pounds—therefore suitable for all round household or laundry use.

It is all that the name implies. Finished entirely in polished nickel and of attractive design it first pleases the eye.

It is simple in construction—can be entirely taken apart or assembled with no tools but a wrench.

Efficiency and satisfaction to the user it has—beyond any iron yet made.

Guarantee—So durable and strong is it that it is guaranteed for three years.

Learn more about it by ordering a sample—at least. Knowledge of it means you will want it for your customers.

American Electrical Heater Co.

1351 Woodward Ave.

Detroit, U. S. A.
Oldest and largest exclusive
makers.





**This Transformer Guards Your
Sign Current
SAVES YOU 75%**

Packard

**Transformers are attached direct to
sign, eliminating long leads and
resulting drop in voltage.**

The ratio of these Transformers with 11 volts secondary is such as will give full secondary voltage under full load conditions, the drop in the transformer being taken care of by the ratio of the windings. These transformers are controlled by the primary circuit, so when the lamps are not on, the entire transformer is out of commission. The usual voltages are 110 primary and 11 secondary, but we will furnish any primary voltage up to 250 and any secondary voltage up to 110 at the regular price.

These little transformers are built with the same care and high-grade materials that characterize our regular transformers. We cover them with our regular two-year guarantee.

**Complete Instructions with each Transformer
Let us send you one on trial, at our expense**

**The Packard Electric Co.
Warren, Ohio**

A Fixture Straightener

Few outlets in ceilings are straight. An outlet box set at a slight angle, too small to be noticed when the box is installed, will often cause a fixture to hang several inches out of line, and that means dissatisfaction to the consumer and trouble for the contractor. Time is wasted in trying to make the box straight and often it is loosened and weakened by attempting to do so.

The Federal Sign System, Electric, of Chicago, is marketing a handy little



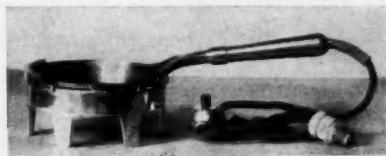
device designed to overcome these troubles and apparently it solves the difficulty. Any workman or helper can hang a fixture perfectly plumb and firm with the Federal Fixture Straightener. It's done in a few moments, whether the ceiling outlet is straight or not.

Fixtures fastened to sloping ceilings, rafters, or barrel vaulted ceilings are often hard to adjust to an exact perpendicular, but once adjusted with this device the fixture is held firmly in the correct position. It is easily and quickly tightened and cannot work loose.

The Federal Fixture Straightener consists of a ball and socket joint, as shown in the illustration, which can be tightened or loosened by turning the nut which contains the socket. It is made entirely of malleable iron, in two styles, one with a stud for attaching to any standard outlet box by screws through the holes provided for this purpose in all outlet boxes, and the other with a threaded sleeve for 3-8 inch studs or gas pipe.

An Electric Frying Pan-Stove Combination

A new cooking appliance is on the market which should prove exceedingly popular to the housekeeper, as well as for the heavier service in restaurants and hotels. It is a combination device which is not only a complete frying



When used as a frying pan.

pan, capable of cooking everything that can be fried in the ordinary manner, but it can also be turned into an electric disc stove by simply inverting it. It is then suitable for all kinds of light cooking, toasting, and similar uses. The pan is made of sheet steel and has a polished metal handle. The heating element is located in the bottom of the pan and is hermetically sealed between steel walls so that it is completely protected from oxidation. The whole utensil can be easily cleaned.

The pan heats very quickly and can be run at three different temperatures—high, medium, and low, the desired temperature being obtained by means of an indicating push-button switch. The stand is made of aluminum, so designed that the frying pan can be



Inverting the frying pan makes a stove.

run at full heat without injuring the surface of the table on which it is supported. The outfit is very light.

As is apparent in the illustration, this appliance is exceedingly business-like in appearance and makes a utensil of great practical utility. There is a single button-push switch handy in the attachment cord.

50% Net Profit

for both Central Station and Contractor is what our original



proposition will pay. This is a new co-operative advertising and sales plan, designed by a central station man to meet practical conditions. It is *not* a plan to sell the

PREMIER

AUTOMATIC SWEEPER

to you: it's a plan to sell them to the residence customers on your circuits. It's the best plan yet devised for putting the best electric suction cleaner in every electrified home in your territory.

Premier Vacuum Cleaner Co.

Power Avenue, Cor. 12th Street,
CLEVELAND, OHIO

Tear off this coupon

The Premier Vacuum Cleaner Co.:

Send us, at no expense or obligation, the following:—

- (a) PROOF that the Premier Automatic Sweeper is the most practical motor-driven cleaner.
- (b) PROOF that your co-operative Sales-Advertising Plan will pay us 50% net Profit.
- (c) PROOF that we can make, on an average, One Dollar of Profit for each residence lighting customer in our territory.

Company.....

Town.....

Individual.....

More Profit for the Contractor



Material which enables the wireman to do the best job in the least time, is the kind of material that *successful* Contractors buy. The new

ADAPTIBOX

is that kind of a fitting. It shows the Contractor three profits—an extra profit on his wiremen's time; a saving of money invested in stock, and the elimination of expressage and delays when a special fitting is needed after the job is started.

The ADAPTIBOX



is a new conduit fitting with more combinations and fewer parts than anything heretofore offered. It is adaptable to an endless variety of service, and the amount of stock you carry is less than one-quarter what would be required in any other fittings available.

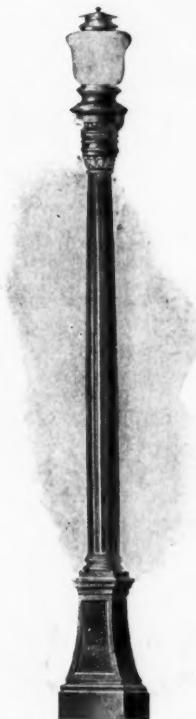
Send for Sample and Prices

The sample is the most convincing argument. Our new bulletin tells the story in few words. Remember: the man who uses ADAPTIBOXES can underbid any competitor and still show the largest profit. GET WISE.

The Bonnell Manufacturing Co.
CLEVELAND, OHIO

**A New Magnetic Arc Equipment
For Ornamental Street
Lighting**

The General Electric Company has introduced a new application of the magnetite arc lamp which will be of great interest to all who are following the rapid development of decorative street lighting. As shown in the illustration, the lamp is encased in a new type of reflector and mounted on an ornamental iron pole, and makes a most attractive unit. The first installation has just been put into service in New Haven, Conn., and a photograph of the night illumination is



reproduced on page 15 of the Decorative Street Lighting Number of *Electrical Progress*, bound into this magazine. The story of the New Haven installation will be told in detail in the next issue of *Selling Electricity*.

In operation and design the lamp mechanism is essentially the same as that of the standard direct current series luminous arc lamp, of which

There is No Profit in the Lamps You Don't Sell

SALE-ABILITY is one of our best talking-points for the **STERLING** lamp.

Of course, the **STERLING** has quality—no lamp can be sold successfully now-a-days unless it is thoroughly up to the standard—but in addition to the **STERLING** quality, the **STERLING** service and all the other **STERLING** vantagepoints, we are able to show the Jobber or the Electrical Merchant that

STERLING LAMPS SELL BEST

The reason for **STERLING** sale-ability is that we put our effort into selling **STERLING** lamps FOR you, instead of going to a lot of expense in selling them TO you. The **STERLING** sales plan is the most complete and successful co-operative lamp advertising and sales campaign ever devised. It brings the demand to YOU, not to us. Write for our proposition. There's profit in it for you.

STERLING
ELECTRICAL MFG. CO.

Warren, Ohio

more than 75,000 are now in operation. The arc is struck between a stationary non-consumable copper upper electrode and a movable magnetite lower electrode burning under normal up-draft conditions. A single side rod supports and carries the electrode, fume dome and chimney.

The lamp is equipped with a diffusing globe that is unique in design in that it is perfectly filled with light and no circular shadows are cast upon it by the electrodes. The globe may be removed without disturbing the alignment of the electrodes. A large ash pan is provided, which is easily removable. By using the new specially designed diffusing opal globe, which furnishes a beautiful secondary source of pearl white light of high efficiency and low intrinsic brilliancy, it is possible to place the lamps at the extremely low height of 14 1-2 feet without producing a glare.

The lamp casing constitutes the

capital of the supporting post or column and is so designed that, by releasing a latch, it may be lowered to give free access to the lamp mechanism as readily as the similar operation is accomplished on an ordinary arc lamp.

Within the base of the pole an absolute cutout is placed so that the trimmer may disconnect the lamp from the line before starting to work on it.

A Correction

In the article which appeared in this department of the December issue of *Selling Electricity*, under the title, "A Real Electric Roadster," it was stated that the recent remarkable trip of the new Bailey roadster, from Boston to New York was made, a distance of 244 miles, in four daily runs. This statement was in error. The total running time was 12 hours and 12 minutes and the trip was made in two days, Oct. 8th and 9th, only one night, at New Haven, being passed on the road.

Mr. Power Solicitor:—

**It enables you to
secure more business
and simplifies your work**

Solicitors calling upon isolated plants may, by connecting in a portable type of printing attachment, show the owner the cost of his energy from the private plant and the probable saving to be effected by using central-station service. It will show the rate he can earn. It will also serve to show the owner of the isolated plant all interruptions and consequent losses in his private plant service.

A great advantage is that the portable printing attachment may just as easily be installed in the manager's office, where he can personally watch its operation.

The expense of central-station solicitors on isolated plants or large prospective power customers may be greatly reduced and their work made much easier by the use of the Chicago Printing Attachment.

Our new Bulletin No. 55 goes into very complete detail upon this class of work. We will gladly send it upon request.



It makes the solicitor's work easier—Bulletin No. 55 tells about it.

MINERALLAC ELECTRIC COMPANY
Merchants Loan and Trust Bldg.
Pacific Coast Representative: VAN E. BRITTON, 697 Monadnock Bldg., San Francisco

In writing to advertisers, mention "Selling Electricity"

POSITIONS OR MEN WANTED

The rate for "Positions or Men Wanted" advertisements of forty words or less is one dollar an insertion; additional words, one cent each; payable in advance. Remittances and copy should reach this office not later than the 15th of each month for the next succeeding issue.

Replies may be sent in care of Selling Electricity, 17 Madison Avenue, New York City.

WANTED—Experienced and energetic light and power solicitor. Only men that can show results need apply. In making application state fully in first letter your experience, references, and what salaries you have received. Address Jackson Railway & Light Company, Jackson, Tenn.

WANTED—Man, 30 years old, comfortably located in a City of 100,000 for 5 years wants to make a change. Now doing Contract Agents work, writing all the ads, selling all the signs, doing all Flat Rate Work, adjusting all complaints, handling purchase and sale of electrical appliances, directing the Solicitors, and what not. Am not a technical man, but know the language and can explain it in good English to the Laymen. Present employers will congratulate the firm that engages me. Don't write unless you want a good man and are willing to pay the price. Address "Buckeye," care Selling Electricity, 17 Madison Avenue, New York City.



Everson—his cleaner

A Word to the Salesman: You don't have to talk away the bad points with the New Everson. Its lightness, power, appearance and price have the sale three-quarters made before you say a word. Our Booklet is wrapped and stamped—your name, please.

Everson Manufacturing Company
271 Franklin Street, Boston, Mass.

GREETINGS



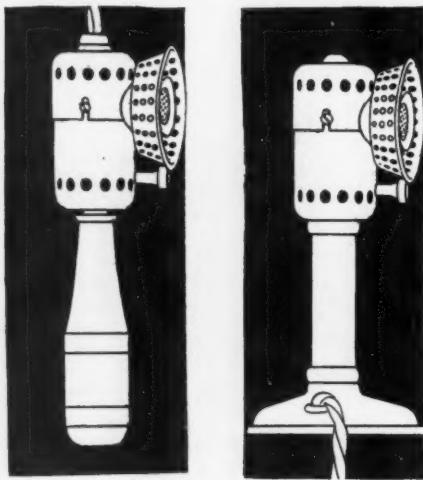
Corinthian Standard

Patented

MAY that light which illuminates the road to prosperity burn steadily for you.

Flour City Ornamental Iron Works
Minneapolis, Minnesota

What every cigar store in the country has been waiting for



The Helion

ELECTRIC CIGAR LIGHTER with the HELION Guarantee

NO more experimenting with electricity to light cigars. That day is over. No more buying sight unseen. The "Helion" day has arrived.

Before a year has passed there will be a Helion in every cigar store in the land. "Helion" and "Electric Cigar Lighter" will mean one and the same thing.

No trouble selling Helions when the Helion Guarantee goes with every lighter, and guarantees a fifty cent heater to light as many cigars as the biggest store can sell in six months.

The Helion is made in two types—pendent for the cigar store, and desk for the office and den. Handsomely finished in gun metal and nickel.

Every central station should have a Helion of each type in its display room. The Helion practically sells itself. All you have to do is show it and the Helion Guarantee. Every smoker will want one for his office.

Pittsburgh Electric Specialties Co.
927 French Street

Pittsburgh, Pa.

In writing to advertisers, mention "Selling Electricity"

INVESTMENT SECURITIES

We recommend to investors the following:

*Commonwealth Edison Company

First Mortgage 5% Gold Bonds. Due June 1st, 1943. Interest payable March 1st, September 1st.
Price to yield nearly 5%.

*Commonwealth Edison Company

(Stock)

Paying 7% per annum, 1 1/4% quarterly, February 1st, May 1st, August 1st, and November 1st.
Price to yield about 5 1/2%.

Public Service Co. of Northern Illinois

Being a consolidation of

North Shore Electric Company
Illinois Valley Gas and Electric
Company
Economy Light and Power Company
Chicago Suburban Light and Power
Company
Kankakee Gas and Electric Company
Firstand Refunding Mortgage 5% Bonds.
Dated October 1st, 1911. Due October
1st, 1956. Interest payable April and
October.
Price to yield better than 5%.

Public Service Co. of Northern Illinois

(6% Cumulative Preferred Stock)

Dividends quarterly, February 1st,
May 1st, August 1st, and November 1st.
Earning over four times dividend
requirements.
Price to net better than 6%.

The stocks of the above Companies are tax-exempt in Illinois.

We make a specialty of above securities and will be glad to furnish further information and prices.

*Listed on Chicago Stock Exchange.

Russell, Brewster & Co.
Bankers and Brokers
116 West Adams Street
CHICAGO

New York Office
111 Broadway

Members New York Stock Exchange
Members Chicago Stock Exchange

Bring in the Strays On Your A. C. Power Circuit

by showing the "impossible" things that the single phase, alternating current, reversible

Kimble Motors

will do for them.

Start on the PRINTERS first, and the newspaper offices. They will be the easiest converts, because

Kimble Printing Press Motors

do things that every printer wants and no other motor gives:

"Fast or slow, by the touch of the toe"

Reverse almost instantly at any speed.

Accelerate or retard by easy gradations, not by "steps or jerks" Use power only in direct proportion to speed.

Moving Picture Theaters

come next.

Our picture machine motor relieves the operator of the slavery of grinding out the tape by hand, and gives a finer "shading" than he can do by hand.

Ventilating Fans

Controlled ventilation is more important in winter when windows and doors are closed than in summer.

Demonstrate the KIMBLE A. C. FAN and MOTORS to Hotels, Restaurants, Theaters, Churches, Halls, Offices, Factories.

The only reversible, variable speed fan in existence. Change it from intake to exhaust instantly by pulling a chain and run any speed, forward or back.

Then get after Laundries, Ice Cream Factories, and all industries that operate sewing or stitching machines; in fact ANY kind of plant where variable speeds are useful and the power to reverse is of service.

Send for our catalog and discounts to central stations, dealers, etc. Our book is a liberal education in A. C. electricity.

Kimble Electric Co.
1115 Washington Boulevard
CHICAGO

In writing to advertisers, mention "Selling Electricity"

Beardslee Service



Your stock of lighting fixtures may amount to \$50,000.00 or it may be only \$78.96; very often you require an extra fixture.

Can you tell when the manufacturer can ship it? When selected from Beardlee's "S" (stock) Catalog it is shipped within twenty-four hours.

The "S" also means service.

The third edition of the "S" catalogs is more complete than ever and will be ready soon. Ask for it—Catalog "S 2."

All goods are trade-marked.

Trade  Mark

Beardslee Chandelier Mfg. Co.
The House of Quality
216 So. Clinton Street, Chicago

For 25 Cents!

A Book of Central Station New Business Systems

Several hundred copies of the book on New Business Methods which was issued by the Central Station Development Co., of Cleveland, have come into our hands.

A most valuable complete working system for Central Station business - getting, including file card forms, form letters, folders, contract forms and details for complete equipment. It is filled with facts and figures of the greatest value and importance to the Central Station Salesman. It presents a clear analysis of commercial problems, with practical suggestions for **GETTING THE BUSINESS**---not theory and conversation---but **METHODS**, concrete and efficient.

The Central Station Development Company is dead, but the book is alive from cover to cover. **YOU NEED A COPY!**

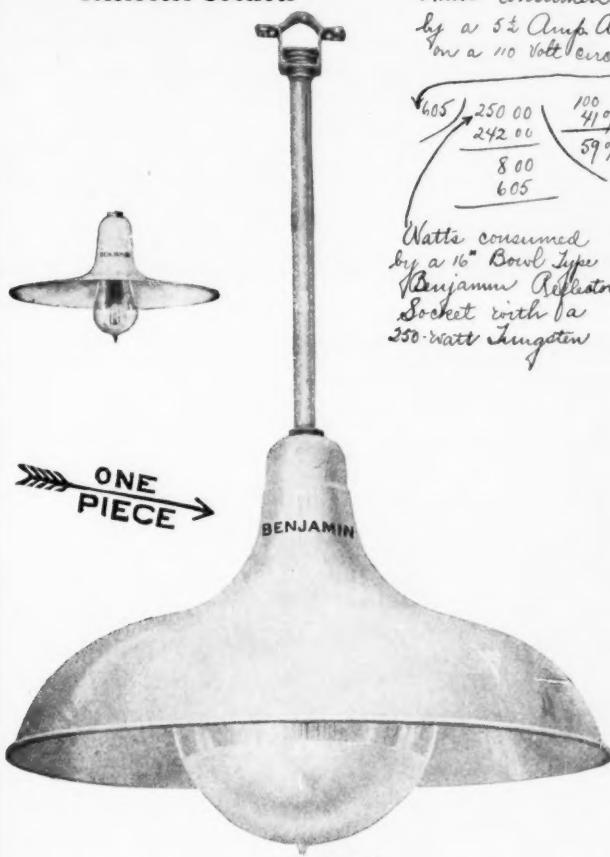
We will mail you a copy of this book, postage paid, on receipt of 25 cents in stamps. This just covers our cost.

Send 25 cents in postage stamps to

THE RAE COMPANY
17 Madison Ave., New York

Benjamin Shop and Factory Fixtures

Reflector Sockets



Cat. No. 6149

Watts consumed
by a 52 Amp Arc
on a 110 Volt circuit

605
250.00
242.00
8.00
605

100
44%
59%

Saving of a
Reflector Socket
in current consumption
as compared with
an arc lamp

Watts consumed
by a 16" Bowl Type
Benjamin Reflector
Socket with a
250-watt tungsten

I had never figured
it before

Large Users of Benjamin Fixtures

Missouri Pacific Railroad
Pullman Car Company
Illinois Central Railroad
Chicago & Alton Railroad
Davenport Locomotive Works
United States Steel Company
Tennessee Coal & Iron Co.
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Fairbanks, Morse & Company
Liquid Carbonic Company
Etc., etc.

We Manufacture Cluster and Single Unit Fixtures Covering all Conditions
of Industrial Lighting

Write us for Photographs of Large Installations. Where Shall we send Bulletin "S"?

Benjamin Electric Mfg. Company

Manufacturers of Enamelled Steel Reflector Sockets and Mill Clusters. Tungsten
Fixtures for In and Out-Door Lighting. Wireless Clusters. Lighting Specialties

NEW YORK
27 Thames St.

CHICAGO
120-128 So. Sangamon St.

SAN FRANCISCO
151 New Montgomery St.

Holophane in the Big Building

The logical lighting glassware for big buildings is HOLOPHANE. The manager of a big building demands efficiency above everything, but he cannot ignore appearances. Holophane combines attractiveness with efficiency to a degree not found in other globes or reflectors.

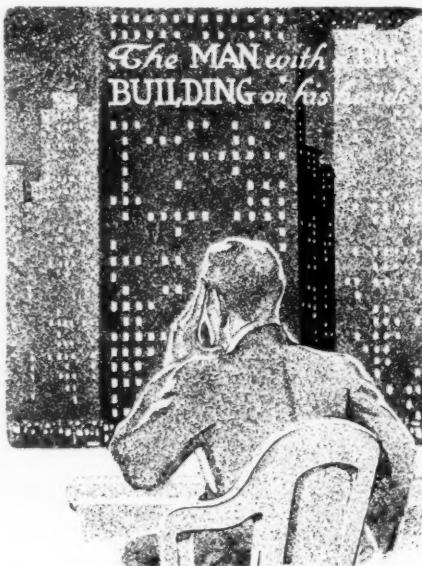
We have just issued No. 3 of the series of Instruction Sheets under the title, "The Man with a Big Building on His Hands." It contains just the arguments that the building manager will listen to. It tells him in a simple, easy-to-understand way just what his lighting problem is and just how he can solve it to his best advantage. It shows him how the Holophane Illuminating Engineers can be of service to him and tells him just where this service will save him money.

Our object in issuing these Instruction Sheets has been to assist the trade in still

further raising the standard and increasing the efficiency of illumination. These Sheets co-operate with the Contractor by assisting him to secure more business and more profitable business. They co-operate with the Central Station by assisting the salesman to interest and convince the hard-to-get customer. They contain simply plain arguments in favor of more and better illumination and practical instruction on how to secure it.

We are glad to supply these Instruction Sheets, ready imprinted, for the use of Contractors and Central Stations. They make good campaign literature because they are what their name implies, instruction sheets—not boastful advertising.

Write for a sample of "The Man with a Big Building on His Hands." When you see the sample you will want to send one to every big building manager in your territory.



HOLOPHANE COMPANY

SALES DEPARTMENT

NEWARK, OHIO

New York

Boston

Philadelphia

Chicago

San Francisco

London

Holophane Company, Ltd., 62 Front St., W., Toronto, Canada



20x25 FEET. CONTAINS 480 LAMPS
Built by The A. & W. Electric Sign Co.

J. W. BACHARACH

Clothes for Men and Young Men

391 East Water Street

Milwaukee, March 10th, 1911.

The A. & W. Electric Sign Co.,
Prospect Ave. and W. Third St.,
Cleveland, Ohio.

Gentlemen.

We are very much pleased with the electric sign you made for us. You have given us all we asked for and the sign works very nicely. Up to now we have had no trouble with same.

Yours very truly,

J.W. Bacharach

In writing to advertisers, mention "Selling Electricity"

Proclamation

We cannot help but thank our many "Selling Electricity" readers for the courtesy and co-operation shown in the preceding year, and sincerely hope to merit a continuance as we may both be mutually benefited.

It has been our consistent effort to give our clients good goods at honest prices, improve existing conditions, put on the market a better class of goods, and, above all, to show real satisfaction.

Our facilities for executing special designs and staple goods are unsurpassed, and we do not hesitate to comply with all the necessities and wants of our customers.

Thanking you for past favors and wishing you a most prosperous and profitable forthcoming year,
Yours for a Happy New Year.

Have you received one of our No. 17 Catalogs? Sent to dealers, express prepaid, on request.

R. Williamson & Co.

Manufacturers of

Electric and Combination Fixtures and Art Domes

Largest Fixture Factory and Supply Depot in the World.

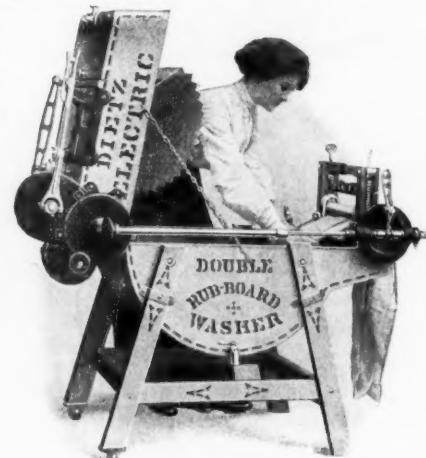
Washington and Jefferson Sts. Chicago

Don't Coax —Compel

If you want a

Washing Machine

that *makes* the dirt come out investigate



Dietz Washer

(Double Rubboard)

Contains two curved flexible connected wash boards oscillating in opposition and holding the clothes in the suds between with just the right pressure to draw the dirt and leave the linen.

**All We Ask
is Your
Opinion
of Our Central Station
Sales Plan**

The John Dietz Mfg. Co.
Cincinnati, Ohio

Eastern Distributing Agents
THE BRANDER CO.
50 Church Street, New York

It Takes Time to Sell Diamonds

Because the customer is usually shown a tray full of stones at once, and just about the time he has decided on one, some other equally pretty catches his eye and he finds himself unable to decide between the two.

It's the same way in selling lighting fixtures. The dealer displays his wares by the dozens on the walls and ceilings of his store, and although he may direct the customer's attention to some especial fixture, other designs are always in sight to distract and confuse. Frequently the time and labor necessary to make a sale are worth more than the profit on that sale.



get away from this objection. They are easily and quickly sold because each fixture is displayed alone. TTC Tungstoliers are made on the sectional plan with separate body, arms, etc., which are instantly taken apart or assembled. Only 86 parts are necessary in order to display 1,944 different fixtures. It takes but a jiffy to change from one design to another, so that the customer sees but one fixture at the time.

There's no confusion, no indecision: the customer makes his choice quickly and the sale is soon finished. Both the dealer and the customer are saved time, labor and worry.

TTC Tungstoliers and the new plan for selling them are fully described in our illustrated book, "A New Way To Sell Fixtures." It will pay you to send for it today—it is free.

THE TUNGSTOLIER COMPANY

MAIN OFFICE AND WORKS:

NEW YORK

CONNEAUT, OHIO

DALLAS



Every Man in Your City

Will Want Ornamental Lighting
ON HIS STREET if He
Reads This!



Here is a Decorative Lighting Number of ELECTRICAL PROGRESS, studied and written to interest every man in your city who can help build up a popular demand for Brighter, Busier Streets—And that means every Merchant, Banker, Professional Man, Newspaper Editor, Clergyman, City Official or Real Estate Agent in the town, and every other public-spirited citizen. It tells what this street lighting does for a town and why, and how co-operative systems are organized.—Why it is just as valuable for the bank, the club, the hotel and the big store.—Why it is suitable for the private estate. There are plenty of appealing pictures and strong, logical sales arguments.

Read over this copy now. Tear it out of the magazine and you'll see how it looks when your people read it. Then figure how many you need to send one to every Business Man and Property Holder who can help boost the movement. Send in your order TODAY.

ELECTRICAL PROGRESS costs—for 10,000 and over—2 cents per copy.
5000 to 10,000— $2\frac{1}{2}$ cents per copy.
1000 to 5000— $3\frac{1}{2}$ cents per copy.
Under 1000— 5 cents per copy.

If you sign a contract you enjoy these quantity prices on any orders for any issue, within a year. Send for list of coming issues and a contract form.

Order the Decorative Lighting Number—NOW.

THE RAE COMPANY

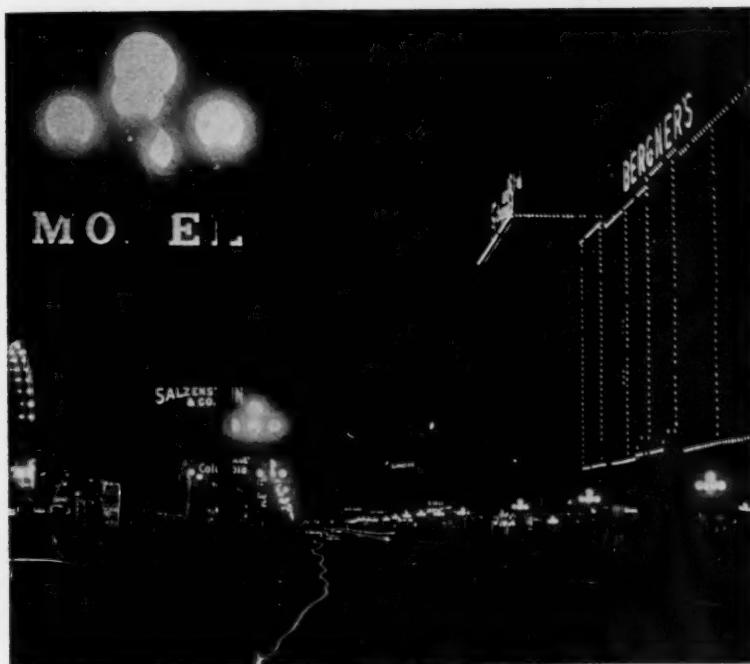
17 Madison Avenue, New York City



In writing to advertisers, mention "Selling Electricity"

ELECTRICAL PROGRESS

Decorative Street Lighting
Number



Modern display lighting in Peoria, Ill.

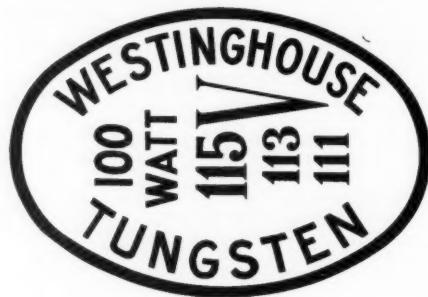
PUBLISHED BY
THE RAE COMPANY
17 MADISON AVE. NEW YORK

JANUARY SUPPLEMENT TO "SELLING ELECTRICITY"

Copyright, 1912, by THE RAE COMPANY

This label on the lamp that gives three times as much light, means exactly what it says—

A Westinghouse Lamp



IT is a Westinghouse lamp made in a Westinghouse factory and sold everywhere by the Westinghouse Company as a Westinghouse lamp.

Another way to distinguish the Westinghouse Wire Type Tungsten is by its uniform lasting strength. Put it to the supreme test—break it and test the filament after it has burned five hundred, eight hundred, a thousand hours.

Its strength—now established in all classes of service, because it was the original continuous filament lamp—accounts for the fact that the demand for the Wire Type Tungsten is twice as great today as it was a year ago. Send for the booklet entitled "The Strong Tungsten Lamp."

**WESTINGHOUSE ELECTRIC AND MFG. CO.
East Pittsburgh, Pa.**

Incandescent Lamp Dept. (Westinghouse Lamp Co.) Bloomfield, N. J.



Electrical Progress

A SMALL MAGAZINE PREACHING THE POPULAR
APPLICATION OF ELECTRICITY



Decorative Street Lighting Number

The Influence of Light

The Power of Modern Display Lighting and Its Commercial Application

In order to appreciate just why our modern systems of ornamental street lighting are becoming so popular and therefore, of necessity, so commercially profitable, it is necessary to look behind the application and at Light itself. The psychology of light, and its influence on every one of us today, is interesting, because it is not the dry consideration of the abstract but rather just plain "human" facts about ourselves; and it carries a practical suggestion that every business man can put to good use.

Light has a fascination for the human being that has exhibited itself in a thousand ways since the world began. Men have worshipped fire,

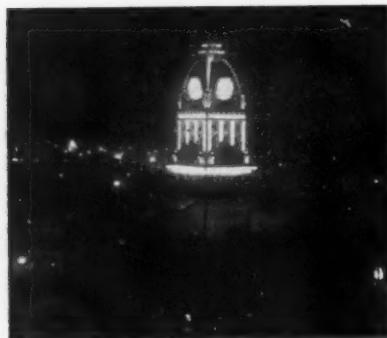
the sun, the moon, and the stars, and just as darkness has typified sin and wretchedness, light has always been associated with good and cheer. For light appeals to us, makes us light-hearted, and spreads the spirit of contentment. Each man knows that for himself, else why should he delight to gaze into an open fire when the logs are blazing, and why should the myriad lights of "Coney Island" or "The White City" affect him as they do?

And it is just this that explains the adaptability of decorative lighting. It is as appropriate for the great international exposition as it is for the "pleasure park"; it is in harmony with the stately architecture of the marble



In Atlanta, Ga., the streets are lined with lights and the city stays awake.

bank building, no less than where used to outline a department store for the week before Christmas. And the reason is plain: Our modern display lighting is not simply a scheme of decoration, it is a humanizing influence that makes direct appeal to our inherent



The court house tower in Newark, Ohio, an example of dignified public display lighting.

love of light. It is in effect a subtle personal appeal to every man, woman, and child, because, by nature, they love the light.

And so men have come to recognize this alluring power and shape it to effect their ends. No modern "world's fair" would be complete, nor could it win popular favor, without those marvelous triumphs of illumination that make every massive hall and tower stand out like a fairy land. The great popular feature of such functions as the recent Hudson-Fulton Celebration

in New York or the Knight Templars' Carnival in Chicago is always the electric lights that outline the buildings, festoon the streets, and sparkle from countless signs. The climax of water pageants is always the night illumination of the ships; the "Luna Parks" and "Dreamlands" could not live a night without their sparkling lights, for that is what lends the "carnival spirit," which opens our hearts and pocketbooks.

And to invoke this same carnival spirit, to put this appealing influence of light in commercial harness, merchants and business men are joining hands, in town and city, to make the shopping district bright and cheerful at night. They are lining the curbs with flaming arc lamps, or spanning the street with arches of incandescent lamps, or installing ornamental iron lamp-posts, bearing soft glowing lights, that create an immediate attraction to young and old. And because of this subtle influence of light, such decorative lighting systems bring out the people in the evenings, to walk the bright, cheerful streets, and where the crowd walks it spends money. For, in the evening, we have laid aside our business cares and are easily impressed; the merchant's window display stands out clearly in the brightly lighted window, and we see much that we want and buy. The influence of light is *creating business* for those merchants.



Denver's "pleasure park." What could be more beautiful? And humanity answers the call night after night.

Harnessing the Commercial Loadstone

How the Function of Street Lighting Has Come to be More than the Mere Lighting of Streets.

The commercializing of street illumination has been an interesting process. From an exclusive function of the "City Fathers" the lighting of the streets has come to be of live, personal interest to every merchant and business man in the community. It is recognized nowadays as one of the most vitalizing factors in the business life of a city, and the Board of Trade, the Merchants' Association, or the Civic League is most often the organization that we find behind such public movements for ornamental street lighting.

In one town we find the merchants co-operating, through the Board of Trade, to fight the lure of a neighboring city and strive to create a greater interest and dependence in the local shops. They finance and install a system of ornamental lamp-posts to line the streets throughout the business section. The merchants know that if the public but appreciated the facilities at home, they would rather buy there than in the larger city; and they know that the time to make this impression most forcefully is in the evening, when they may display their goods in brightly lighted windows, and when the passing throng has the

leisure to examine them and feel their personal appeal.

In another town, newcomers, more energetic and aggressive merchants, finding no room in the "Old Centre," started a new shopping district up-town, by installing a chain of arches across the street with a sign "New Centre" to draw the crowds. This



Ornamental posts are as decorative by day as by night on any street.

happened in South Bend, Ind., where a "New Centre Association" was formed to conduct the campaign. Business shifted to the brighter, more prosperous district, real estate values rose, and soon the "Old Centre" put up arches of their own, in self-defence. They knew no other way of counteracting the obvious attractive power of the lights.

And that has been the story in every instance. Over two hundred towns and cities in the United States, within



A St. Louis street that is bright enough for reading. Note the men sitting on the steps.

the last three or four years have installed such systems for special street illumination, and in all but a very few cases the movement has been instituted strictly for the purpose of administering a commercial tonic to the community. The streets of these towns were neither gloomy nor dangerous, the city lights had kept apace with the growth of population, and were effective, there was no public clamor for more electric lights to guide or guard the wayfarer, but there was a determination on the part of the local business interests to find some medium for commercial stimulation, some way to "wake the town up," to bring the people out in the evening and attract the trade from out of town.

Recent installations of decorative street lighting have proved in many a "dead town" that towns don't really die—they sleep—in the dark,

and when the streets are made bright and cheerful in the evening, there come the crowds that spend their money and make a "live town."

The Personal Post Ad

What Ornamental Lighting Does for the Club Bank, Church, Store, Park, and Public Building.

It is an interesting feature of ornamental lamp-posts that they seem to be as popular and effective for use in private installations for hotels, clubs,



There is an infinite variety in post design that satisfies every condition.

and department stores as in the lighting of parks or city streets. This is especially noteworthy in the case of the hotel, for in New York City, for instance, this ornamental curb lighting has been so universally adopted that it has practically become the sign of a hotel. And the reason behind it is apparent as you approach and see the effect of the row of glowing lights that seem to bid you welcome and to promise warmth and cheer within.

There is a dignity in these groups of light that lends itself well to the spirit of the modern hotel, and the many types of posts and the variety possible in the grouping of the lights themselves give plenty of opportunity for originality and distinction. But for the hotel and for the club it is the appealing attractiveness of the artistic illumination itself that is most particularly appropriate. It is a "light of welcome seen from afar."

And the same principle applies to the large store, the restaurant, or wherever prosperity depends on popular favor. A store, surrounded or



An attractive installation of park lighting. The walks are always bright and cheerful.

fronted by a chain of ornamental posts, stands out pleasantly conspicuous among its surroundings and is seen in an atmosphere of cheerful



A personal post ad. These lights surround a Terre Haute, Ind., high school.

radiance that is an irresistible attraction. When we walk down that street we walk on the bright side, and we are susceptible to such inviting influence as that store or that hotel may wish to exert.

In the lighting of parks and public buildings—the city hall, the library, the Union Station—it is equally desirable that the public attitude should be one of harmony, and the influence of display illumination is far-reaching. The outlining of domes, towers, and gables in electric lights and the artistic placement of ornamental posts, lend an evening atmosphere that appeals to all and becomes part of the pleasing identity of the institution.

Moreover, this holds no less true when applied to our dignified and



Ten of these posts advertise a New York hotel.

ornate banks and churches. This softening, humanizing influence of light establishes a bond with all the people, and the park and the church and the bank all increase their usefulness.

Ornamental Lighting for Residence Streets and Private Estates

We are apt to think of ornamental street lighting as the gala attire of the busy downtown streets, and as a mighty ally of the merchant. But, can any system of street illumination be more appropriate for residence streets and the entrance driveways to



A residence street in North Yakima, Wash., and its appropriate lighting system.

private estates than the classic lamp-post with its glowing balls or its hanging lanterns? The accompanying reproduction of an evening photograph, taken on Naches Avenue, in North Yakima, Wash., shows how effective and harmonious these lighting systems can be made.

The ordinary glaring arc light is certainly most inappropriate among such rows of beautiful trees and in the atmosphere of our finer "home streets" and the crudity of a succession of unshaded incandescent lamps projecting from high wooden poles is no more agreeable. We want our homes and

the streets we live upon to be free from glare and the bare materialism that surrounds our working hours, we want our atmosphere of refinement and harmony undisturbed by inartistic and glaring street lights.

The modern ornamental lamp-post gives the light we need, and is truly decorative in its effect. The two rows of glowing balls outline the street and walks without sacrifice of the spirit of privacy.

For the long drives leading into private estates these lamp-posts are quite as appropriate and practical.

They provide a welcome to the guest and a constant convenience and protection, and the many types of posts and fixtures give ample opportunity for selection. Standard ornamental posts are available in both iron and concrete, and mounting from a single lamp to five, while there are various styles of lanterns and brackets that are adaptable.

The use of the modern high efficiency Mazda lamp makes the cost of such lighting exceedingly reasonable, and the light itself is soft, diffused, and thoroughly enjoyable.

How to Organize Co-operative Lighting In Your Town

Decorative lighting will do as much to stimulate business and help you in your town as it has ever accomplished anywhere else, IF YOU WILL DO YOUR PART! Take these facts before your Board of Trade or your Merchants' Association, if it is really earnest in its desire to work for the town; otherwise, get together a few representative merchants and business men and start an independent movement. There will be no difficulty in accomplishing your purpose, no matter whether you aim to boom the entire city or a competitive shopping district or a single business street. The people will give you immediate and enthusiastic support. That has been the experience in hundreds of cities, large and small, "dead" and "alive" and your community is made up of the same human men and women.

The first thing to do in organizing a decorative lighting system is this—get the facts and find out what other men have done and what you can do if you try. Write to the various cities where such systems have been installed and ask them how they did it. Write to the boards of trade, the mayors, and the local electric light companies. Find out what the system costs per post, who paid for the posts, who pays for the light and maintenance, and what benefit the town has felt. Get day and night photographs and full facts and figures; they will be given gladly. Write the manufacturers of posts and lamps; they can help too. Talk the whole matter over with your own mayor and electric light company, and your local newspapers; they will

all support you enthusiastically if they see what you are going to do. Then when you have your facts and figures and know what co-operation the City and the lighting company will pledge, call a public meeting.

The public meeting should be well organized and truly representative of not only your merchants but your best professional and business men of all kinds, and it should be widely advertised. "Splurge" it in the papers, send out hand bills, promise music, speeches, and lantern-slide views of street lighting in other cities (the manufacturers will loan them to you), and the afternoon before the meeting call up on the 'phone as many of the best people as you can and urge them personally to be on hand. Then have

a band parade the streets for half an hour, playing lively ragtime music and carrying a transparency reading, "Come to the Booster Meeting—Hear About the New Ornamental Street Lights." Have the band play before



Another "personal ad." A chain of lights around a new office building, still under construction.

the hall, and then inside before the meeting, and the crowd will come with all the enthusiasm it will hold.

In the meeting, cut out all oratory and funny stories and get down to facts and figures. Explain the intent

and details of the movement, read the letters from other cities, give them facts and figures, show the lantern slides, and have representatives of other boards of trade and manufacturers of posts and lamps talk on civic improvement and what decorative street lighting has accomplished elsewhere. Then announce what the Board of Trade, the City, and the electric light company will do; or if there is no board of trade organize one for the immediate purpose. This meeting will arouse public enthusiasm and a popular understanding; it will bring out a preference for the best type of lighting equipment and it will elect a committee or a board of trade to handle the work. If an efficient civic organization is at hand the movement should be in its charge; but the public meeting is essential, for there must be strong public backing.

It remains, then, to work out the details of the installation itself; how many posts, of what type, what it will cost, what part the city will assume to compensate for present equipment displaced and how the system shall be maintained. Naturally these details will vary with each case, but as a rule the cost of the installation, the current and the upkeep is divided between the interests to be benefited—the adjacent property owners, the tenants of that property, the City, the electric light company, and the



A typical winter night scene in a hustling city. The picture was taken after midnight to get a clear street.



Decorative Street Lighting Designs

Independent Foundry Company
Portland, Oregon

(Ten)

community at large, through popular subscription. The property owners and tenants and the city naturally pay the largest share. These details can be worked out without great difficulty, though there will probably be a certain number of tenants or property holders who will at first refuse to participate. It has been found best to make the installation complete, however, and if the lights before the unprogressive stores are simply left dark, the contrast is so marked that the advantage of the lights soon becomes apparent to all, and they will join.

When the system is ready, have another public celebration with speeches from a stand on a prominent corner; and when the mayor closes the switch and the lights burn let the band march up and down and lead the parade, and the whole town will follow to inspect the effect of the new lights. And there will be a great, immediate, and permanent increase in the evening crowds, to the perpetual benefit of every merchant, every business man, and the entire community.

Why Special Street Lighting Appeals to—

The Merchant—

The merchant wants to sell his goods, and he wants his windows to be working for him every hour that his store is closed. Decorative street lighting in the shopping district attracts the people at the time when they are most susceptible to influence,

when the window displays have the most sales power. If the streets are dark, people stay indoors; but a bright, cheerful glow brings them out in the evening for relaxation and exercise. The evening hours are the best hours for the window displays, *if they are seen*. Business cares have been laid aside, and the throngs that pass the shop windows discover those innumerable things that they want, and the business follows. Decorative street lighting actually creates business that otherwise would lie dormant; and it builds up new trade from outlying villages and farms, for the gala lighting brings the country folk to town.

The Real Estate Man—

Anything that helps the merchant helps the real estate man, for as the retail sales increase in any town, the town grows; that means more people who must buy land and rent houses. Decorative street lighting makes a "live town," the kind of town people want to live in, the kind of town that supports a hustling board of trade and steadily increases in new industries. That's what the real estate man wants, and it pays him to work for decorative street lighting.

The Professional Man, Banker and Contractor—

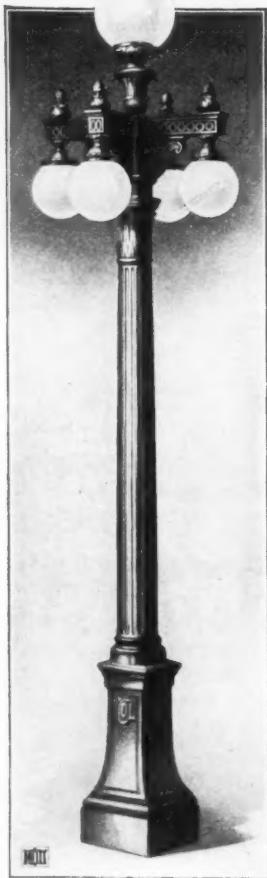
Every professional man, every doctor, lawyer, architect, engineer, and contractor wants to see prosperous growth in the town he works in. It means constantly more people, more



The arch system of "booster lighting" that has helped boom many western cities.

Ornamental Lamp Posts

for Arc and Tungsten Lamps

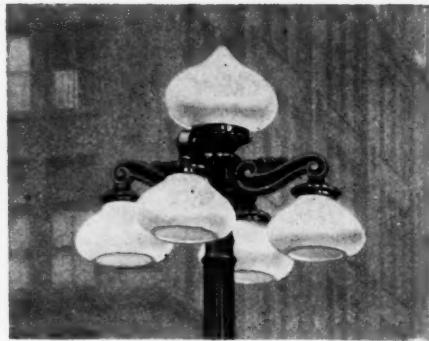


2006 J. Corinthian

Write for Catalogue

The J. L. Mott Iron Works
5th Ave. and 17th St., N. Y.

Holophane Units for Street Lighting



These scientifically designed Reflector Units are not only more artistic in appearance than ordinary lighting glassware, but they practically double the amount of useful illumination upon the sidewalks and streets.

Holophane Units for Street Lighting

reduce the cost of maintenance —give better lighting effect with smaller lamps and consequently reduce the consumption of electric current. Their first cost is a little higher than that of ordinary balls or globes, but they save money every hour the lights are burning.

Write for bulletin, containing much useful information on how to arrange street lighting installations and how to get the most illumination at the least cost.

Holophane Company
STREET LIGHTING DEPARTMENT
Newark, Ohio

New York Boston Philadelphia Chicago
San Francisco London
Holophane Company, Ltd. 62 Front St., W., Toronto

building, more business activity in every line, and more practice, more work, and a larger income for himself. There is no stronger influence for stimulating the business vitality of a community than an ornamental lighting system in the shopping centre. It keeps the town awake, and attracts new people, and gives the community a reputation for enterprise and prosperity that is a boom in itself.

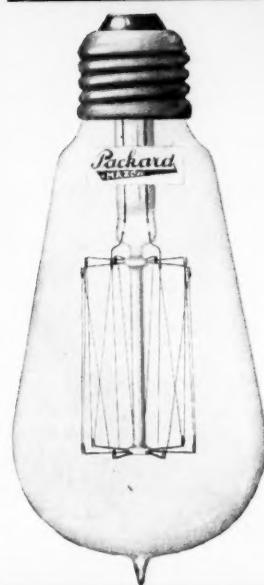
The Editor, the Clergyman, and the City Official—

Every newspaper, every church, and every city official who is working for the physical and moral advancement of the community will find in the modern system for decorative street lighting the strongest of allies. The chief of police, in one of our largest cities, recently stated in his annual report that if the special street lighting and the electric signs and outlining were discontinued he would have to double his force. Light is a master moral-suasion, it discourages vice and crime;

and bright, cheerful city streets are a great aid to civic health. When the streets are attractive and inviting the town stays awake and public opinion holds sway; and a clean, wholesome city grows in population and prosperity, and every citizen is benefited.

The Amusement Places and Public Utilities—

The theatres, the restaurants, the street railway, the telephone company, the electric light and power company, the gas company, and all other interests whose prosperity depends on local business conditions and the growth in population, should be first in their efforts to further and support the movement for decorative street lighting. Anything that enlivens the community and brings out the people in the idle hours helps us all, but especially the amusement interests, the restaurants, and the street railway. A bright, cheerful, up-to-the-minute town grows because it is a "live town," and that means more money in every pocket.



The Best Effects

Planned by

Packard Engineers

Those installations of street lighting that are pleasing as well as economical have been planned by our engineers who employ

Packard Mazda Lamps exclusively

Our engineers are at your service; when you desire plans and cost figures on street illumination, *ask us*

The New York & Ohio Company
Warren, Ohio

Packard Lamps

Ask the man who uses them

YOU CAN MOVE YOUR MACHINES LIKE CHECKERS

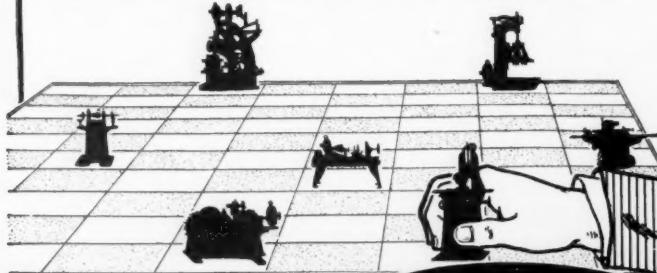


Figure out some time when you see your men hauling material about the factory, how much you could save if you could only locate your machines so that the work would pass direct from one operation to another.



Take the floor plan of your factory--forget all about the present location of line shafts, etc.--and move your machines **any place** where they will be most convenient. Then imagine the work going through without any lost motion. That's "Scientific Management" you hear so much about, and you can easily have it if you

Equip Your Machines With **FORT WAYNE MOTORS**

Bring the machine to the work and save the big expense of hauling. Operate one machine or a hundred, as you please, and use only the power required to do the work. Eliminate flapping belts, line shafting, idlers and pulleys which waste half the power before it reaches the machine.

With adjustable speed motors your men can always obtain instantly just the proper speed for each operation and this will further increase your production.

When it is necessary to enlarge your plant or change the lay-out of a department you can move your machines like checkers.

There are many more arguments in favor of Fort Wayne Motors, but the quickest way to become convinced that they **actually save you money** is to put one on some machine and try it. It won't be a difficult matter to change your whole shop over then to motor drives. It won't require any new equipment for we have a motor adapted to every machine you operate and you can install them gradually if you want to.

Let us send an expert to talk over your problem with you. Or if you simply want some information on the subject, send for our new Bulletin 1134 on "Northern" Type Motors, the motors with an unexcelled history.

FORT WAYNE ELECTRIC WORKS

Of General Electric Company
"WOOD" SYSTEMS
1603 Broadway, Fort Wayne, Ind.



No better motor is built than this "Northern" Type D. C. motor.

FACTORIES:
Madison, Wis.
Fort Wayne, Ind.

Branch Offices--All Large Cities

“OLD ELMS BUT NEW IDEAS”

—NEW HAVEN'S NEW SLOGAN



NEW HAVEN'S GREAT WHITE WAY

All Standards Are Cast Iron and Manufactured by the
Ornamental Lighting Pole Company

This installation of the new
luminous arc for Ornamental Street Lighting
is the first of its kind in the world.
With photographs taken before and after
we can prove it is the only system
for you to consider if interested in lighting.

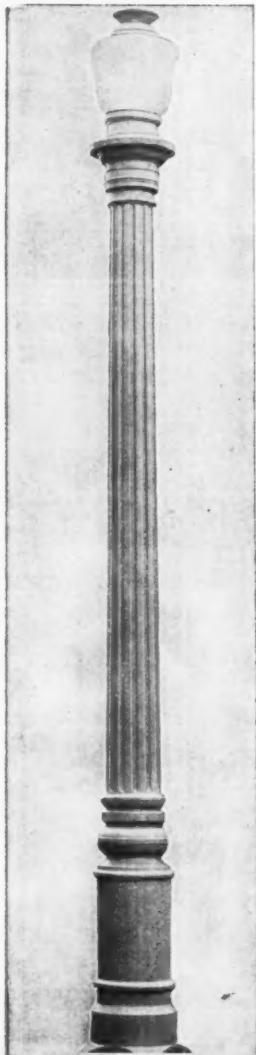
*We can give you the cost of Poles,
Lamps, Wire, Conduit work and labor
on this or any other type of public
or private ornamental outdoor lighting.*

POLES FOR ALL TYPES OF LIGHTING

ORNAMENTAL LIGHTING POLE COMPANY

19 BATTERY PLACE
NEW YORK CITY

New Inverted Series Luminous Arc Lamp



This lamp marks one of the greatest advances in ornamental street lighting.

It combines the efficient and economical Luminous Arc Lamp with a pole that lends itself to highly artistic treatment.

This imposing unit enhances the appearance of streets, boulevards, parks and localities where ornamental lighting is desired.

Learn more about this new lamp which gives a soft, white light, affords such an attractive method of street lighting and at the same time presents a very pleasing and handsome appearance by day.

This new lamp has all the advantages of the Series Luminous Arc Lamp of which there are more than 75,000 in use in the progressive cities and towns of this country.



General Electric Company

Principal Office: Schenectady, N. Y.

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Many sorts of glassware are effective when lighted—some are beautiful when cold—but the only glass that is beautiful and effective *both* when lighted and when cold is

IRIS

"The most Beautiful Glass made in America." It is as difficult to describe IRIS as to describe a sunset. The rich glow of color, the shimmering iridescence, the bold yet delicate designs—all must be seen to be appreciated. The distinctive effects are secured by fusing the designs into the shades—not by painting them on. This gives a richness which suggests that it is expensive, but in reality the prices are very reasonable. We will gladly send samples to offices of central station companies.

How many of your customers know that there is such a thing as IRIS?—Truly beautiful glassware that is moderate in price *and at the same time*, an efficient reflector!

There is no satisfaction in handsome "shades" that absorb all the light or in reflectors that though efficient are not in harmony.

For lighting our homes, we want artistic fitness as well as light and that is just what makes IRIS ideal for home lighting.

There is a variety in form and in decoration that provides a wealth of suggestion.

**FOSTORIA
GLASS SPECIALTY
COMPANY**
FOSTORIA, OHIO

Every merchant is busy right now taking stock—but when the inventory is done and the books are balanced—*you can sell him an Electric Sign.* It's really the best time in the year

Every merchant will know just what he has made during the year—or what he hasn't made—and he'll either feel good about it or he'll feel bad about it, and you have him either way. He's in just the right frame of mind to adopt Electric Advertising, for if the profits have been fat and happy he feels prosperous and ready to grow a bit; if he has been disappointed HE KNOWS HE MUST DO SOMETHING. He's got to make good in 1912.

I have built every kind of a sign for every kind of a merchant and I know just what kind of Electric Advertising will pay the best profits in each case; I know because I have had to learn. I want to go over your town with you and find out what each man needs, and prescribe for each case. Then we'll go after the business and we'll get it.

If you want to make an intelligent, efficient and profitable campaign for outdoor display business this month, drop a line to

T. E. Valentine

Valentine Electric Sign Co.
Atlantic City, New Jersey